CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS.
New York, April 18, 1907.

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CONSTRUCTION NEWS.

PLANS AND SPECIFICATIONS ON FILE.

The following Plans (P.), Specifications (S.) and Bidding Sheets (B. S.) may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York:

Bids close.	Work.	Place.	On file.	See issue
Apr.				
20	Locomotive jib crane	Philadelphia, Pa	S	3-28
25	Bridges	Glendive, Mont	P., S. & B. S.	3-21
•26	Bridge, etc.	Watertown, Mass	P. & S.	4-11
27	Pattern shop	Portsmouth, N. H	S	4- 4
May				
1	Roads, etc.	Ft. Adams, R. I	P. & S.	4- 4
1	Water supply mains	North Chicago, Ill	S	4-18
•1	Breakwater	Newport, R. I	S	4-11
4	Paving	Boston, Mass	S	4-11
4	Boiler-room machinery	Pensacola, Fla	S	4-11
•8	Excavation	Boston, Mass	S. & B. S	4-11

•Work advertised in Engineering News.

LIST OF CONTRACTS PENDING.

LIGHT, HEAT AND POWER PLANTS.

Bids close. Work. Place. On file. See issue
At once.Power plant, Danville, Ind..............Apr. 11
Apr. 23.Franchise, Leavenworth, Wash..........Apr. 11
Apr. 23.Electrical supplies, Washington, D. C...Apr. 18
Apr. 24.Boiler, generator, etc., Des Moines, Iowa.Apr. 18
Apr. 25.Electrical equipment, New York, N. Y..Apr. 18
Apr. 25.Repairs, New York, N. Y..............Apr. 18
Apr. 29.Heating apparatus, Macon, Ga.........Mar. 28
Advertised, Eng. News, Mar. 28 and Apr. 4.
Apr. 30.Conduit system, Seattle, Wash.........Mar. 21
May 1.Lighting, Natchez, Miss...............Mar. 7
Advertised, Eng. News, Mar. 7 and 14.
May 4.Machinery, Pensacola, Fla..............Apr. 11
May 20.Equipment, Los Angeles, Cal...........Mar. 28
Advertised, Eng. News, Mar. 28 to Apr. 18.
June 1.Electric fixtures, Fort Wood, N. Y....Apr. 18

BRIDGES.

Apr. 18.Bridges, Liberty, Ind..................Apr. 11
Apr. 18.Bridge extension, New York, N. Y....Apr. 11
Apr. 20.Bridge, Washington, D. C.............Apr. 11
Advertised, Eng. News, Apr. 11 and 18.
Apr. 20.Bridges, Norristown, Pa...............Apr. 18
Apr. 20.Abutments, Lancaster, Ohio ....Apr. 18
Apr. 22.Bridges, etc., Greenock, Ont............Apr. 18
Apr. 22.Bridge, New Lexington, Ohio............Apr. 11
Apr. 22.Superstructure, Cincinnati, Ohio ....Apr. 11
Apr. 23.Bridges, Beatrice, Neb..................Apr. 4
Apr. 25.Bridges, Glendive, Mont...............Mar. 14
Advertised, Eng. News, Mar. 14 to Apr. 4.
Apr. 26.Bridge, Woonsocket, R. I..............Apr. 11
Advertised, Eng. News, Apr. 11.
Apr. 26.Bridges, etc., Watertown, Mass........Apr. 18
Advertised, Eng. News, April 11 and 18.
Apr. 27.Bridge, Jonesboro, Tenn................Apr. 18
Apr. 29.Bridges, Scranton, Pa...................Apr. 18
Apr. 29.Viaduct, New Orleans, La.............Feb. 28
Advertised, Eng. News, Feb. 28 to Apr. 11.
Apr. 30.Bridge flooring, Washington C. H., Ohio.Apr. 11
May 1.Bridges, Ottawa, Ont. ....Apr. 18
May 1.Improving arch, Veedersburg, Ind.......Apr. 18
May 1.Bridge, Tillamook, Ore..................Apr. 18
May 1.Bridge, Pottsville, Pa....................Apr. 18
May 4.Abutments, Cleveland, Ohio ....Apr. 18
May 4.Viaduct, Milwaukee, Wis................Apr. 11
May 6.Bridge, Greensburg, Ind................Apr. 18
May 7.Bridge, etc., Covington, Ind.............Apr. 18
May 7.Bridge, Princeton, Ind..................Apr. 18
May 8.Bridges, Kokomo, Ind...................Apr. 18
May 8.Bridges, Coshocton, Ohio...............Apr. 11
May 15.Bridge work, Washington, D. C.........Apr. 11
Advertised, Eng. News, Apr. 11 to May 9.
June 4.Bridge, Pensacola, Fla..................Apr. 18
Advertised, Eng. News, Apr. 18.

BUILDINGS.

At once.Houses, Pittsburg, Pa..................Apr. 18
Apr. 22.Stairs, West Point, N. Y..............Apr. 4
Advertised, Eng. News, Apr. 4 to 18.
Apr. 22.Plans, Sacramento, Cal..................Apr. 4
Apr. 22.School, Eatontown, N. J................Apr. 11
Advertised, Eng. News, Apr. 11 and 18.
Apr. 22.Schools, New York, N. Y...............Apr. 18
Apr. 23.Residence, New York, N. Y............Apr. 18
Apr. 24.Wrecking, Albany, N. Y................Apr. 18
Apr. 24.Plumbing, etc., West Point, N. Y......Apr. 4
Advertised, Eng. News, Apr. 4 to 18.
Apr. 25.Public bath, New York, N. Y..........Apr. 18
Apr. 27.Pattern shop, Portsmouth, N. H.......Apr. 4
Apr. 29.Electrical equipment, New York, N. Y...Apr. 18
Apr. 29.Schools, New York, N. Y...............Apr. 18
May 1.Plans, Milwaukee, Wis..................Feb. 28
May 1.Buildings, North Chicago, Ill............Mar. 14
May 2.Marble work, Burlington, Vt.............Apr. 4
Advertised, Eng. News, Apr. 4 and 11.
May 6.Post-office, Trenton, N. J...............Apr. 4
May 7.Post-office, Lafayette, Ind..............Apr. 4
Advertised, Eng. News, Apr. 4 and 11.
May 8.Screening, Fort Oglethorpe, Ga.........Apr. 11
Advertised, Eng. News, Apr. 11 to May 2.
May 13.Officers' quarters, Washington, D. C....Apr. 18
Advertised, Eng. News, Apr. 18 to May 9.
May 14.Post-office, Rockford, Ill..............Apr. 18
Advertised, Eng. News, Apr. 18 and 25.
May 15.Schools, San Jose, Cal.................Apr. 18
May 15.Storehouse, etc., Fort Screven, Ga......Apr. 18
Advertised, Eng. News, Apr. 18 to May 9.
May 15.School, Maryville, Mo...................Apr. 11
May 15.Post-office, Denver, Colo................Apr. 4
May 17.Gymnasium, Whipple, Ariz.............Apr. 18
Advertised, Eng. News, Apr. 18 to May 9.
May 20.Lamp shop, Tompkinsville, N. Y........Apr. 18
Advertised, Eng. News, Apr. 18 and 25.
June 4.State Capitol, Pierre, S. Dak...........Mar. 7

WATER SUPPLY AND IRRIGATION.

Apr. 18.Water mains, New York, N. Y..........Apr. 11
Apr. 18.Paving, etc., Erie, Pa.................Mar. 28
Advertised, Eng. News, Mar. 28.
Apr. 19.Water-works, Simcoe, Ont................Apr. 4
Apr. 20.Trenching, etc., Richmond, Que........Apr. 4
Apr. 20.Water-works, Maple Creek, Sask.........Apr. 4
Apr. 20.Levees, drains, etc., Rock Island, Ill....Mar. 28
Apr. 20.Water-works, Lafayette, Ind............Apr. 11
Apr. 20.Dam, Chester, S. C....................Apr. 18
Apr. 22.Cast-iron water pipe, etc., Cincinnati, O..Apr. 11
Apr. 23.Repairing reservoir, Bridgeton, N. J......Apr. 11
Advertised, Eng. News, Apr. 11 and 18.
Apr. 23.Water-works and sewers, Staples, Minn..Apr. 11
Advertised, Eng. News, Apr. 11.
Apr. 23.Galv. iron water pipe, South Africa (Foreign) ....Apr. 4
Apr. 23.Water-works, Thorold, Ont..............Apr. 4
Apr. 24.Water-works, Ft. Moultrie, S. C........Mar. 28
Advertised, Eng. News, Mar. 28 to Apr. 18.
Apr. 24.Water mains, New York, N. Y..........Apr. 18
Apr. 25.Water-works and sewers, Staples, Minn.Apr. 18
Advertised, Eng. News, Apr. 11.
Apr. 27.Cast-iron pipe, Washington, D. C......Apr. 11
Advertised, Eng. News, April 11 and 18.
Apr. 29.Ditches, Garner, Iowa ....Apr. 4
Apr. 29.Cast-iron pipe, etc., Carthage, N. Y....Apr. 18
Advertised, Eng. News, Apr. 18.
Apr. 30.Ditches, etc., Belle Fourche, S. Dak....Mar. 28
May 1.Water-works, Hartsville, S. C...........Apr. 4
May 1.Water supply mains, North Chicago, Ill..Apr. 18
May 2.Completing pumping station, Phila., Pa..Apr. 4
Advertised, Eng. News, Apr. 4 to 25.
May 2.Reservoir, Astoria, Ore.................Mar. 28
May 3.Water-works, Forsyth, Mont.............Apr. 11
May 4.Boilers, etc., Pensacola, Fla..............Apr. 18
May 6.Cast-iron pipe, etc., Brandon, Man......Apr. 18
May 6.Filters, etc., Albany, N. Y...............Apr. 4
Advertised, Eng. News, Apr. 4 to 18.
May 7.Water mains, Columbus, Miss.........Apr. 18
May 13.Reservoir, Waterville, N. Y............Apr. 18
Advertised, Eng. News, Apr. 18 to May 9.
May 15.Ditch, Albany, Ill.......................Mar. 28
Advertised, Eng. News, Mar. 28 to Apr. 18.
May 16.Cleaning strainers, Galveston, Tex.....Apr. 18
Advertised, Eng. News, Apr. 18 and 25.
May 21.Ditches, Mitchell, Neb...................Apr. 4
Advertised, Eng. News, Apr. 4 to 25.
June 3.Well, etc., Fort Bliss, Tex..............Mar. 21
June 5.Dike, Crawford, Neb....................Mar. 21
Advertised, Eng. News, Mar. 21 to Apr. 11.

SEWERAGE.

Apr. 18.Sewer, Youngstown, Ohio ....Apr. 11
Apr. 22.Sewers, Scranton, Pa...................Apr. 11
Apr. 22.Sewers, Oshkosh, Wis..................Apr. 18
Apr. 22.Sewers, Rockford, Ill....................Apr. 18
Apr. 23.Sewers, etc., Shelbyville, Ky............Apr. 18
Advertised, Eng. News, Mar. 21.
Apr. 23.Sewer, East St. Louis, Ill...............Apr. 18
Apr. 23.Sewers, Waterbury, Vt..................Apr. 11
Advertised, Eng. News, April 11 and 18.
Apr. 23.Sewers, Rushville, Ind.................Mar. 28
Advertised, Eng. News, Mar. 28 and Apr. 4.
Apr. 24.Sewers, etc., New York, N. Y..........Apr. 11
Apr. 26.Sewers, Tomah, Wis....................Apr. 11
Apr. 27.Sewers, Oshkosh, Wis..................Apr. 18
Apr. 30.Sewer pipe, Winnipeg, Man.............Apr. 11
Apr. 30.Sewers, Fernie, B. C....................Mar. 28
Advertised, Eng. News, Mar. 28 to Apr. 11.
Apr. 30.Sewers, Brampton, Ont..................Apr. 4
May 1.Sewers and water-works, Hartsville, S. C.Mar. 28
Advertised, Eng. News, Mar. 28 to Apr. 25.
May 1.Sewers, Camden, S. C..................Mar. 28
Advertised, Eng. News, Mar. 28 to Apr. 25.
May 1.Culverts, etc., Ft. Riley, Kan..........Apr. 18
May 3.Sewers, Sandersville, Ga..............Apr. 18
Advertised, Eng. News, Apr. 18 to May 2.
May 3.Drain, Utica, N. Y.....................Apr. 11
May 6.Sewer, Binghamton, N. Y..............Apr. 18
Advertised, Eng. News, Apr. 18 to May 2.
May 7.Sewers, Trenton, N. J..................Apr. 18
May 8.Sewers, Richmond, Ind.................Apr. 18
Advertised, Eng. News, Apr. 18.
May 8.Sewers, Boise, Idaho....................Apr. 18
May 13.Sewer, Washington, D. C...............Apr. 18
Advertised, Eng. News, Apr. 18 and 25.
May 15.Storm-water drains, Baltimore, Md.....Apr. 18
Advertised, Eng. News, Apr. 18.

STREETS AND ROADS.

Apr. 18.Broken stone, Bloomfield, N .J...........Apr. 11
Apr. 18.Paving, Buffalo, N. Y....................Apr. 11
Apr. 19.Grading, Upper Sandusky, Ohio..........Apr. 11
Apr. 19.Highway, Hillsboro, Ohio........ ......Apr. 4
Apr. 19.Paving, Sycamore, Ill....................Apr. 18
Apr. 20.Sidewalks, etc., Ogden, Utah...........Apr. 18
Apr. 20.Paving, Reedsville, Wis.................Apr. 11
Apr. 22.Roads, Logansport, Ind....... ....Apr. 4
Apr. 22.Repaving, New Orleans, La............Apr. 18
Apr. 22.Sidewalks, Oakville, Ont................Apr. 18
Apr. 23.Highway, New Philadelphia, Ohio.... ..Apr. 4
Apr. 23.Paving, Wadsworth, Ohio...............Apr. 11
Apr. 24.Highway, Columbus, Ohio...............Apr. 11
Apr. 24.Paving, Watertown, N. Y...............Apr. 11
Advertised, Eng. News, Apr. 11.
Apr. 24.Sidewalks, Stratford, Ont...............Apr. 18
Apr. 24.Repaving, Buffalo, N. Y................Apr. 18
Apr. 24.Repaving, etc., New York, N. Y........Apr. 18
Apr. 24.Sidewalks, etc., New York, N. Y........Apr. 18
Apr. 25.Broken stone, etc., New York, N. Y.....Apr. 18
Apr. 25.Highway, Lisbon, Ohio...................Apr. 11
Apr. 26.Paving, etc., Cincinnati, Ohio..........Apr. 18
Apr. 25.Paving, etc., East St. Louis, Ill.........Apr. 18
Apr. 26.Paving, etc., Louisville, Ky.............Apr. 18
Apr. 27.Paving, Bridgeport, Pa...................Apr. 11
Apr. 27.Roads, Greencastle, Ind.................Apr. 11
Apr. 29.Grading, Fond du Lac, Wis..............Apr. 11
Apr. 29.Macadam, Mt. Holly, N. J..............Apr. 11
Apr. 29.Paving, Salisbury, Md............. ....Apr. 4
Advertised, Eng. News, Apr. 4-11.
Apr. 30.Roads, Pittsburg, Pa....................Apr. 18
May 1.Sidewalks, Blue Grass, Iowa...........Apr. 18
May 1.Paving, etc., Cincinnati, Ohio..........Apr. 18
May 1.Roads and walks, Ft. Moultrie, S. C....Apr. 4
Advertised, Eng. News, Apr. 4-25.
May 1.Macadam, etc., Ft. Du Pont, Del.........Apr. 4
Advertised, Eng. News, Apr. 4-11.
May 1.Roads, etc., Ft. Washington, Md.........Apr. 4
May 1.Roads, etc., Ft. Adams, R. I.............Apr. 4
May 1.Roads, Ft. Hancock, N. J...............Apr. 11
Advertised, Eng. News, Apr. 11 to 25.
May 1.Grading, etc., Ft. Totten, N. Y..........Apr. 11
May 2.Paving, Petersburg, Va.................Apr. 18
Advertised, Eng. News, Apr. 18 and 25.
May 3.Highway, Painesville, Ohio ....Apr. 18
May 3.Paving, etc., Cincinnati, Ohio..........Apr. 18
May 4.Paving, Boston, Mass..................Apr. 11
May 4.Paving, Chagrin Falls, Ohio.............Apr. 11
May 6.Paving, etc., Ashland, Ohio ....Apr. 18
May 7.Paving, Alexandria, La.................Mar. 28
May 7.Roads, Vincennes, Ind..................Apr. 18
May 7.Roads, Brazil, Ind......................Apr. 18
May 15.Paving sewers, etc., Natchez, Miss....Apr. 18
Advertised, Eng. News, Apr. 18 to May 9.
May 16.Paving, etc., Bluefield, W. Va.........Apr. 18
Advertised, Eng. News, Apr. 18 to May 2.

MISCELLANEOUS CONTRACTS.

Apr. 18.Breakwater, Goderich, Ont...... ......Apr. 4
Apr. 18.Dam, excavation, Brookville, Ind........Apr. 4
Apr. 18.Bridge terminal, New York, N. Y........Apr. 11
Apr. 18.Tree guards, pipe fence, New York, N. Y.Apr. 11
Apr. 19.Rock crusher plant, Panama ....Apr. 11
Apr. 19.Engineering supplies, Panama............Apr. 11
Apr. 19.Dredging, New York, N. Y.............Apr. 11
Apr. 20.Subway, Jacksonville, Fla.......... ....Apr. 4
Apr. 20.Levees, etc., Rock Island, Ill..........Mar. 28
Apr. 20.Cement, stone, sand, Portland, Me......Mar. 28
Advertised, Eng. News, Mar. 28 to Apr. 18.
Apr. 20.Locomotive jib crane, Philadelphia, Pa..Mar. 28
Apr. 22.Cement, Provo, Utah..................Mar. 28
Advertised, Eng. News, Mar. 28 to Apr. 18.
Apr. 22.Crematory, Portland, Ore...............Mar. 28
Advertised, Eng. News, Mar. 28 to Apr. 18.
Apr. 22.Tunnels, approaches, bridge substructures, Long Island City, N. Y............Mar. 21
Advertised, Eng. News, Mar. 21.
Apr. 22.Light-house, New York, N. Y.........Apr. 11
Apr. 23.Tunnel entrance, Boston, Mass.........Apr. 11
Advertised, Eng. News, April 11 and 18.
Apr. 23.Dam machinery, Louisville, Ky.........Mar. 28
Advertised, Eng. News, Mar. 28 to Apr. 18.
Apr. 23.Garbage Boxes, Chicago, Ill............Apr. 18
Apr. 24.Coal and ash conveyor, Ellis Island, N. Y.Apr. 18
Advertised, Eng. News, Apr. 18.
Apr. 24.Engineers' supplies, New York, N. Y..Apr. 18
Apr. 24.Removing garbage, etc., Schenectady, N. Y. ....Mar. 21
Advertised, Eng. News, Mar. 21.
Apr. 24.Levee, Memphis, Tenn..................Apr. 11
Apr. 24.Steel reinforcement, Huntley, Mont....Apr. 11
Advertised, Eng. News, Apr. 11 and 18.
Apr. 25.Subways, New York, N. Y..............Apr. 4
Apr. 25.Subway ventilation, New York, N. Y..Apr. 18
Apr. 29.Undergrade crossing, Louisville, Ky.....Apr. 18
Apr. 29.Cribs, piers, etc., Milwaukee, Wis......Apr. 11
Advertised, Eng. News, Apr. 11 to 25.
Apr. 30.Dredging, Tampa, Fla..................Apr. 11
Advertised, Eng. News, Apr. 11 to 25.
Apr. 30.Cement, Roumania (foreign)...... ....Apr. 4
Apr. 30.Wire fence, Ft. Sam Houston, Tex......Apr. 18
Apr. 30.Steel, Belle Fourche, S. Dak..........Apr. 18
Advertised, Eng. News, Apr. 18 and 25.
May 1.Wharf, dredging, Fort Hunt, Va.......Apr. 11
May 1.Breakwater, Newport, R. I.............Apr. 11
Advertised, Eng. News, Apr. 11 to 25.
May 2.Rip-rap, Wilmington, N. C.............Apr. 4
May 2.Dredging, Des Moines, Iowa ....Mar. 14
May 6.Public bath, Albany, N. Y.............Apr. 18
May 7.Refuse destructor, New York, N. Y....Apr. 18
Advertised, Eng. News, Apr. 18 and 25.
May 7.Wireless sets, generating sets, New York,Apr. 11
May 8.Excavation, Boston, Mass..............Apr. 11
Advertised, Eng. News, Apr. 11 to May 2.
May 8.Subways, Washington, D. C...........Apr. 18
Advertised, Eng. News, Apr. 18 to May 2.
May 8.Jetty, Nantucket, Mass.................Apr. 18
Advertised, Eng. News, Apr. 18 to May 2.
May 10.Post fence, Prescott, Ariz...............Apr. 18
May 15.Dredging, Albany, Ill...................Mar. 28
Advertised, Eng. News, Mar. 28 to Apr. 18.
May 21.Lock and approaches, Donaldsonville, La.Mar. 28
Advertised, Eng. News, Mar. 21 to May 16.
July 1.Tunnel, New Zealand (Foreign)........Sept. 13
Advertised, Eng. News, Sept. 13 to Mar. 14.

CIVIL SERVICE EXAMINATIONS.

Apr. 20.Foreman Pub. Wks., Albany, N. Y......Apr. 4
Apr. 20.Foreman, Carpenter, Albany, N. Y......Apr. 4
Apr. 20.Asst. Engr., Albany, N. Y..............Apr. 4
Apr. 23.Mechanical Dftsman., New York, N. Y..Apr. 4
Apr. 23.Heating, Ventl'g Dftsman, New York..Apr. 11
Apr. 24.Testing Assistant, Washington, D. C....Apr. 4
Apr. 24.Apprentice Dftsman, Washington, D. C..Apr. 4
Apr. 24.Asst. Geologist, Washington, D. C.......Apr. 4
Apr. 24.Geologist, Philippines ....Apr. 4
Apr. 25.Elec. Draftsman, New York, N. Y....Apr. 11
Apr. 26.Sanitary Draftsman, New York, N. Y.Apr. 11
Apr. 27.Asst. Civil Engr., Albany, N. Y......Apr. 11
Advertised, Eng. News, Apr. 11.
Apr. 27.Bridge Designer, Albany, N. Y.........Apr. 11
Advertised, Eng. News, Apr. 11.
Apr. 27.C. E. Draftsman, Albany, N. Y.........Apr. 11
Advertised, Eng. News, Apr. 11.
Apr. 27.Masonry Inspector, Albany, N. Y........Apr. 11
Advertised, Eng. News, Apr. 11.
Apr. 27.Bridge Draftsman, Albany, N. Y.......Apr. 11
Advertised, Eng. News, Apr. 11.
Apr. 27.Leveler, Albany, N. Y..................Apr. 11
Advertised, Eng. News, Apr. 11.
Apr. 27.Rodman, Albany, N. Y.................Apr. 11
Advertised, Eng. News, Apr. 11.
May 1.Engineer, Jefferson Barracks, Mo.......Apr. 18
May 1.Engineer, Fort H. G. Wright, N. Y....Apr. 18
May 8.Asst. Chemist, Washington, D. C.......Apr. 18
May 8.Asst. Physicist, Washington, D. C......Apr. 18
May 8.Ch. Engr., Chicago, Ill...................Apr. 18
May 8.Assistant Engr., New York, N. Y......Mar. 21
Advertised, Eng. News, Mar. 21 to Apr. 18.
May 9.Laboratory Helper, Washington, D. C..Apr. 18
May 29.Topograph Draftsman, New York, N. Y.Mar. 21
Advertised, Eng. News, Mar. 21 to May 9.
June 4.Asst. Engineer, New York, N. Y........Apr. 4
Advertised, Eng. News, Apr. 4-25.

RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

ALABAMA NORTHWESTERN.—W. L. Hunter, Secy. and Treas., Falkville, Ala., states that this company, which recently secured a charter, proposes to build a railroad 120 miles long from Gadsden to Sheffield, Ala., via Walnut Grove, Brooksville, Falkville, Moulton and Tuscumbia. S. W. Johnson, Attalia, Ala., is Pres. The headquarters of the company are at Gadsden, Ala.

ASTORIA & COLUMBIA RIVER.—Surveys have been completed for the extension from Seaside to Tillamook, Ore., 47 miles, and the route has been officially adopted. The road is now the joint property of the Great Northern and the Northern Pacific and will be operated by the Portland & Seattle. C. M. Levey is Pres., Tacoma, Wash.

BALTIMORE & OHIO.—The Maryland Court of Appeals has decided that the Baltimore & Ohio R. R. has the right to build its proposed double-track freight cut-off line from Gorsuch, Md., through Baltimore County, about 40 miles. D. D. Carothers is Ch. Engr., at Baltimore. The line will run from Gorsuch to Sewell, Md. Average grade, .3 of 1%; maximum, .5 of 1%. Two tracks probably will be built. Cost, about $9,000,000.

BATON ROUGE, HAMMOND & EASTERN.—Contracts will be let about May for construction of this railroad. It will be about 166 miles long, extending from Baton Rouge, La., to Hammond and Covington, La., Picayune and Beaumont, Miss. Sol. Wexler, New Orleans, is Pres. C. H. Fisk, Hammond, La., is Ch. Engr.

DULUTH & NORTHERN MINNESOTA.—Company has begun the work of grading on an extension from Schaff Lake to Cross River, Minn.; 40 miles, and is making surveys for a further extension from the latter point to Gun Flint Lake, 40 miles. The company is doing its own construction work and will let no contracts. John Millen is Vice-Pres. and Gen. Mgr., and Arthur Mitchell, Ch. Engr., both at Duluth, Minn.

GRAND TRUNK.—Charles M. Hays, Second Vice-Pres. and Gen. Mgr. of the Grand Trunk Railway, on his arrival from England this week, according to Montreal (Que.) press reports, "expressed great satisfaction at the placing of the $5,000,000 worth of debentures. The money, he said, would be devoted to the improvement of rolling stock and the road in general, and as soon as possible the road would be double-tracked from Montreal to Chicago."

KENTUCKY HIGHLANDS.—Incorporated in Kentucky to build a railroad from Frankfort, through the counties of Franklin and Woodford, to Versailles, and through the counties of Woodford and Fayette to Lexington, a distance of about 30 miles. Engineers have been in the field for some time making surveys. A report that the road is to be built in the interest of the Illinois Central is denied by one of the projectors. Capital stock, $250,000. Incorporators: S. S. Bush, John C. Doolan, Edmund F. Trabue, Attilla Cox, Jr., S. H. Owen, Menefee Wirgman and J. D. Winston, all of Louisville, Ky.

MANUFACTURERS' TERMINAL.—This company, recently chartered with $200,000 capital at Harrisburg, Pa., to build a 20-mile belt line connecting the various railroad lines in Erie, Pa., has begun active work on surveys. The proposed route is from a junction with the railroads at Four-Mile creek, south to the old Mill road, and to Glenwood, skirting the foot of the hill, thence west to where it again connects with the railroads. This circuit will connect the Lake Shore, Nickel Plate and Pennsylvania roads on the east, and the Bessemer, Pennsylvania, Lake Shore and Nickel Plate on the west, and will prove of great advantage to manufacturers. The directors are George R. Metcalf, Frank Connell, George T. Bliss, Benjamin J. Walker, Ed. G. Germer, Charles E. Shenk, Henry E. Fish and John R. McDonald. George R. Metcalf is Pres.; Frank Connell, Vice-Pres.; John S. Rilling, Secy.; and John R. McDonald, Treas.

NEVADA COUNTY NARROW-GAGE R. R.—This company will build a cut-off at Chicago Park, Cal. The survey has been completed, and engineers are figuring on the grades and the approaches for the steel bridge which will span Bear River. The cut-off will shorten the line between Grass Valley, Cal., and Colfax three miles. Charles P. Loughridge is Gen. Mgr. and Ch. Engr., Grass Valley.

NEW IBERIA, ST. MARTIN & NORTHERN.—This company has been organized at New Iberia, La., to build a railroad from that place north and east, about 35 or 40 miles, to a connection with some existing road. Capital stock, $500,000. Officers: Pres., F. M. Welch; First Vice-Pres., J. R. Olivier, St. Martinville; Second Vice-Pres., E. C. Roger, Arnaudville; Third Vice-Pres., Fritz Dietein, New Iberia; Treas., Jules Dreyfus, New Iberia. Noted on March 21 under "Louisiana."

NORTH COAST.—This company has filed with the Washington Railroad Commission a map showing the location of the road, which indicates that it is the intention to build a branch from Tieton Pass to Portland, Ore. The main line is from Spokane, Wash., to Yakima, and thence to Tieton Pass; thence northwest to Tacoma and Seattle. The line to Tacoma passes to the south of the present terminus of the Tacoma Eastern, and runs parallel to and midway between the Northern Pacific and the Tacoma Eastern. The road will be 600 miles in length, extending from Spokane via Kiona, Granger and Randle to Seattle, Wash., and Portland, Ore., with a branch from Kiona Junction to Walla Walla, Wash. The route has been surveyed from Spokane to Randle, 320 miles, and grading is in progress from Kiona to Granger, 40 miles. The line is under survey from Randle to Portland and Seattle and from Walla Walla to Kiona Junction, a total of 280 miles. Robert E. Strahorn is Pres.; R. J. Danson, Vice-Pres.; A. G. Smith, Secy. and Treas.; George M. Hofford, Auditor, all of Spokane, Wash. F. L. Pitman is Ch. Engr., with headquarters at North Yakima, Wash., and Jerome Newman is Consult. Engr.

OKLAHOMA CENTRAL.—This company, which is building from Lehigh, Ind. T., to Chickasha, Ind. T., a distance of 150 miles, has increased its capital from $5,000,000 to $10,000,000 for the purpose of pushing the work of the line from Purcell to Chickasha during the summer months. A portion of this expenditure includes a bridge across South Canadian River between Purcell and Lexington. Dorset Carter is Pres., Purcell, Ind. T.; F. Sharp, T. C. Woods, J. S. Keefe, H. Wollenberger, W. G. Walling, G. M. Boutree, W. H. Johnson and M. L. Brittain are directors. F. C. Hand, Purcell, is Ch. Const. Engr.

OKLAHOMA, TEXAS & WESTERN.—We are officially informed that DONALD FITZGERALD, 80 Wall St., New York, has the contract for entire construction and equipment of this line, which will extend from Clinton, Okla., to Canadian, Tex., 108 miles. He has given bond for $100,000 to the railroad company for the completion and operation of the line before April 1, 1908. Right-of-way is secured and capital obtained. Subcontracts will be let. H. D. Cox is Pres., Cheyenne, Okla.

SOUTHWESTERN RY.—Incorporated in Texas to build a railway from Henrietta, Clay County, southwest 35 miles through Clay and Archer Counties, along the line of the old Red River & Southwestern survey. Capital stock, $35,000. Incorporators: Ed S. Hughes and Henry James, of Abilene, Tex.; M. G. Denison, John W. Broad and E. H. Holcomb, of Ft. Worth, Tex., and Henry J. Scott, of Toronto, Ont.

THOMASVILLE & NORTHWESTERN.—Incorporated in Georgia to build a railroad 50 miles long from Thomasdale through the counties of Thomas, Brooks, Colquitt and Berry to a point on the Nashville & Sparks. Capital stock, $75,000. Headquarters of company, Thomasville, Ga. Incorporators: J. F. Harris, W. L. Adams, H. Roberts, C. C. Shelly, of Thomas County; J. J. Hodges, of Brooks County; Berry Croft, of Colquitt; E. M. Smith, J. F. Evans, C. W. Cooper and W. C. Snodgrass.

UNION PACIFIC.—Press reports state that "this company contemplates the construction of 100 miles of double track in Wyoming this year. It will be from Cheyenne to Granger, and will be completed this year, giving the company a double track across the entire state."

WASHINGTON.—The Seattle "Post-Intelligencer" states that "C. H. Cobb, N. C. Healy and associates have completed surveys for the first eight miles of a 25-mile standard-gage railroad with whidh they are to tap their heavy timber holdings on the east coast of Vancouver Island. The company owns in that vicinity 27,000 acres of timber, on which is standing about 1,000,000,(000 feet of fir, cedar and hemlock. The tract is situated on the banks of the Campbell River. Logging is to be commenced on the tract by next August, and as the land is logged the line is to be extended until the railroad is 25 miles long. The camp will employ 125 men, and the output is to be about 150,000 feet of logs per day. The output is to be marketed at Vancouver, B. C. Two locomotives and standard logging equipment will be installed. The contract for the construction of the line is soon to be let. Besides this road, Messrs. Cobb, Healy and associates are to construct a line on the Stillaguamish River this summer, and to commence logging there as soon as their holdings at Port Susan, in Snohomish County, shall have been logged off."

WEST VIRGINIA CONNECTING.—It is stated that bids will be asked soon for building this road from Belington, W. Va., to Rogersville, Pa., 95 miles. An extension of the line from Rogersville to Carnegie, Pa., has been decided upon and surveys are being made. D. F. Maroney is Pres., Pittsburg, Pa.

WESTERN PACIFIC.—The contract for building the section of this road from Deeth, Nev., west to the California state line, a distance of 327 miles, has been awarded to the UTAH CONSTRUCTION CO. of Ogden, Utah, which previously held the contracts for the sections from Salt Lake City, Utah, to Deeth, Nev., 222 miles, and from Oroville, Cal., to the Nevada state line. The E. B. & A. L. STONE CO., of Oakland, Cal., has the contract for building the line from Oakland to Oroville, Cal. The work of grading is making good progress. V. G. Bogue is Vice-Pres. and Ch. Engr., San Francisco, Cal. Noted on March 21.

WOLCOTTVILLE & COLDWATER.—O. G. Wales, Pres., Chicago, states that this company proposes to build a steam railroad 35 miles long from Wolcottville, Ind., to Coldwater, Mich., via Panama, Brushy Prairie and Mongo, and that surveys are to begin at once. The headquarters of the company are at Wolcottville, Ind.

ELECTRIC RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

MECHANIC FALLS, ME.—The contract for building a line from Sabattus to Mechanic Falls has been let by the Lewiston, Brunswick & Bath St. Ry. Co. to the FRED S. & A. D. GORE CORPORATION, Old South Bldg., Boston, Mass. E. D. Reed, Lewiston, is Ch. Engr. and Gen. Mgr. of the L., B. & B. Ry.

GREENFIELD, MASS.—The Greenfield, Bernardston & Northfield St. Ry. Co. has been organized at Greenfield for the purpose of building an electric railway from Greenfield to Northfield, 13 miles. Capital is $75,000. The following directors were appointed: John Wilson, Pres. of the Greenfield Board of Trade; Lester A. Luey and Archibald D. Flower, of Greenfield; John W. Chapin and Everett E. Benjamin, of Bernardston, and Charles H. Webster, of Northfield. Noted on March 21.

CANANDIAGUA, N. Y.—We are officially advised that preliminary survey has been completed for the Canandaigua & Southern Electric R. R. and that 80% of right-of-way is secured. Capital is partly arranged for. George H. Switzer is Pres. and Ch. Engr., 42 Broadway, New York. The line will run from Canandaigua south to Atlanta, N. Y., via Centerfield, South Bloomfield, Bristol Center, Bristol Springs, Naples and North Cohocton, 33½ miles.

HORNELL, N. Y.—The Rochester, Corning & Elmira Traction Co. will build a branch line from Dansville to Hornell.

TRENTON, N. J.—Announcement is made that the Trenton St. Ry. Co. will build an extension from Yardville to Crosswicks and Allentown, N. J. P. E. Hurley is Gen. Mgr., at Trenton.

CHAMBERSBURG, PA.—Survey for the Chambersburg & Southern Ry. Co. has been completed and the contracts will be let soon. The road will connect Chambersburg, Marion and Greencastle. T. M. Nelson is Pres.; A. N. Pomeroy, Vice-Pres.; H. B. McNulty, Secy. and Pur. Agent.; Jos. Sierer, Treas.; F. H. Stouffer, Gen. Mgr., and Wm. McGowan, Ch. Engr.

ELLWOOD CITY, PA.—A charter has been granted to the Ellwood City & Hazeldell Electric Ry. Co. to build a line four miles long from a connection with the Pittsburg, Harmony, Butler & New Castle Street Ry. in Wayne Township, Lawrence County, to the Beaver County line via Hazeldell and Ellwood City, with lines over the various streets of Ellwood City. C. J. D. Strobecker, of Zelinople is Pres.; Wm. Finch, M. B. Dewey, Jordan Johnston and N. B. Duncan are directors. The company is chartered for 99 years. Capital, $25,000.

GREENSBURG, PA.—The Greensburg & Western Ry. Co. has been chartered with $60,000 capital to build a line ten miles long from Pennsylvania Ave. and West Otterman St., Greensburg, to Rodebaugh Station, Grapeville, Jeannette, Penn Borough, Manor, Shawtown and North Irwin. The company will pass under the Pennsylvania Railroad at the first undergrade crossing west of Greensburg, and will build its line over private right-of-way for much of the distance. The directors are: William S. Kuhn, Pres.; Jas. S. Kuhn, Jesse H. Purdy, Jacob B. Van Wagener and Robert P. Watt, all of Pittsburg.

ONANCOCK, VA.—A charter has been issued to the Chesapeake & Atlantic Light & Power Co. to build a trolley road from Wachapreague to Onancock, via Locustville and Onley. The directors named are E. T. Powell, Pres.; Dr. John W. Kellam, M. R. Bullman, W. A. Buston, A. J. McMath, A. N. G. Mears, Benjamin T. Gunter, L. J. Savage, C. B. Savage, B. T. Parks, J. F. Parks, John W. Rogers and E. A. Ames. The capital stock is $100,000. The survey of the road from Onancock to Battle Point, on Mutomkin Bay, via Tasley and Accomack, has been completed. C. C. Long, of Tazewell, Va., is Engr.-in-Charge. Noted on March 28.

FAYETTEVILLE, N. C.—We are officially advised that the James D. Lalor Co., Munsey Bldg., Washington, D. C., is preparing specifications for the Fayetteville Street Ry. & Power Co.'s proposed electric railway line at Fayetteville. It will be 20 miles long. Power-house and full equipment will be required.

CHESTER, S. C.—Surveys and specifications will be completed for the Chester Traction Co.'s line in about 30 days, we are officially advised, when the James D. Lalor Co., Munsey Bldg., Washington, D. C., will be ready to receive bids for the work. The road will be electric, six miles in length, and will need complete equipment.

CEDARTOWN, GA.—The citizens of this place are considering the question of constructing an interurban electric railway to connect the cities of Cedartown, Rome, Rock Mart, Aragon, Lindale and Cave Springs. Dr. William Bradford and E. B. Russell are interested in the project.

ATLANTA, GA.—It is reported that construction work will commence on the Atlanta & Carolina Electric Railway this month. At a recent meeting of the stockholders the capital stock of the corporation was increased to $5,300,000. At the same time an issue of $5,000,000 in bonds was authorized. Beginning at Collegepark, the line will extend through Atlanta and thence to West Point on the west and to Lithonia to Conyers. Franchises and right-of-way are secured.

MACON, GA.—The Macon, Americus & Albany Ry. Co. has been granted a charter at Macon, Ga. This is the company that has already made preliminary surveys, and proposes to build an electric line between Macon and Albany. The capital of the company will be $200,000, and its principal office will be in Macon. It is to traverse the counties of Bibb, Crawford, Houston, Macon, Sumter, Lee and Dougherty, and will go through the following cities: Macon, Byron, Fort Bailey, Marshallville, Montezuma, Oglethorpe, Andersonville, Americus, Smithville, Leesburg and Albany. The incorporators are W. J. Morse, M. Feton Hatcher, J. T. Moore, M. H. Massee, M. J. Hatcher, J. N. Neel and D. W. Hill, of Macon; J. S. Davis and N. J. Cruger, of Albany; J. C. Walker, of Marshallville, and A. C. Riley, of Fort Valley. It is understood construction of the new line will be begun within a short time.

CINCINNATI, OHIO.—Surveys are now under way for the proposed Cincinnati, Reading & Middletown Traction Co. It is expected that actual construction will start this season. The road will be 35 miles long and will connect Cincinnati, Reading and Middletown, also Franklin and Norwood. After the surveys have been made and right-of-way has been obtained the company will be bonded for $1,000,000. W. A. Eudaly is Pres.; W. S. Burkhart, Vice-Pres.; R. Billingslea, Secy., and Thomas Anderson, Treas.

FORT WAYNE, IND.—The Winona & Fort Wayne Traction Co., which proposes to build from this city to Winona Lake, has asked for a subsidy election in Lake Township, Allen County, to vote $10,000 in aid of the construction of the road. The election will be held on May 7. S. C. Dickey, Winona Lake, is interested.

JACKSON, MICH.—The Jackson, Ann Arbor & Detroit Railway Co. expects to build new track between Detroit and Wayne, a distance of about 13¼ miles. Bids will be received May 1.

NEGAUNEE, MICH.—We are officially advised that the Lake Superior [illegible] Traction Co. has secured right-of-way for [illegible] from Negaunee to Marquette, a distance of 14 miles. J. W. Barber is Secy., Schofield Bldg., Cleveland. Surveys are under way. [illegible] company may build the railway with its own forces. W. H. Wagner, care of Sigler Bros., Cleveland, is Pres.; T. F. Laist is Ch. Engr., [illegible] Bldg., Cleveland.

EAST ST. LOUIS, ILL.—The East St. Louis & Southeastern R. R. Co., of East St. Louis, has filed articles of incorporation. The company proposes constructing an electric railway from East St. Louis to Mascoutah and Freeburg, in St. Clair County. Capital, $2,500. The incorporators are: L. [illegible] Haynes, T. W. Gregory, G. C. Pierce, James A. Farmer and Fred H. Kruger, all of whom are connected with the East St. Louis & Suburban system.

MELROSE, WIS.—At a mass meeting held at Melrose recently, plans were perfected for the organization and development of an electric railroad project between Melrose and Sparta. Among those who are active in the movement are G. C. Cromwell and M. M. Austin, of Milwaukee. The officers of the new company are: G. S. Cromwell, Milwaukee, Pres.; James A. Cole, Cataract, Vice-Pres.; Howard Teasdale, Sparta, Secy.; W. A. Sholes, Melrose, Treas. The directors are: A. J. Webb, Robert Crowley and Charles Newland, of Melrose; James A. Cole and G. S. Cromwell.

FAIRFIELD, IOWA.—We are officially informed that the Iowa-Missouri Traction & Power Co. will let contracts about May 1 for constructing its line from Fairfield to Memphis, Mo., 52 miles. Harrison Blackledge is Pres., Keosauqua, Iowa. J. W. Andrews is Ch. Engr., Fairfield, Iowa. Survey has been made and right-of-way obtained. Capital is contracted for. As noted on Dec. 6, contract for power dam for this line was let to the AMBURSEN HYDRAULIC CONSTRUCTION CO., 176 Federal St., Boston, Mass.

MARENGO, IOWA.—We are officially advised that the Marengo & Midland Ry. Co.'s proposed line will be 174 miles long. "Proposed route is from Fairfield and Oskaloosa, respectively, to Millersburg, Iowa, to Marengo, Iowa, thence by separate lines to Vinton and Cedar Rapids, Iowa. Surveys will begin at once. No right-of-way has been obtained. Capital for construction has been pledged, subject to certain conditions, which will assuredly be easily complied with. Letting of contract somewhat indefinite, but in all probability before the end of the present year. These lines are to be built as an extension of the Iowa-Missouri enterprise, from Fairfield, Iowa, to Memphis, Mo. This company has recorded trust deeds in Scotland County, Mo., and Van Buren and Jefferson Counties, Iowa, covering bond issue of $1,000,000 for construction of lines from Memphis to Fairfield." See Fairfield (Iowa) item above. H. H. Brimmer is Pres., Marengo. J. W. Andrews, Fairfield, is Ch. Engr.

LAWRENCE, KAN.—A franchise has been granted by the City Council to the Lawrence Electric Transportation Co. to construct and operate an electric street railway system in this city. The franchise is for a period of 20 years, at the expiration of which the city has the right to purchase the plant and system of the company.

LANGDON, N. DAK.—The Union Railroad Co. has been incorporated, with a capital stock of $100,000, to build a railroad to run between the international boundary to a connection with the Great Northern near Osnabrock. The line is to be surveyed so as to traverse the townships of Hope, Harvey, Loam, Hay and Alma. The directors are: W. L. Drury, Joseph McGauvran, Ole Romfo, George W. Graves, O. E. Thompson, Robert Murie, W. H. Row, Hugh McDowall, John J. Fischer, Peter Olson and Thomas Ullvott.

HELENA, MONT.—The Missoula & Bitter Root Traction Co. has been incorporated to build an electric railway from Missoula to Hamilton, at an estimated cost of $1,500,000. The promoters of the road are P. J. Shannon, O. Blood, J. L. Humble, E. O. Lewis and W. W. McCracken. The capital stock is $40,000, of which $500 has been subscribed.

ST. LOUIS, MO.—The Mayor of St. Louis has signed the bill which grants a franchise to the St. Louis Electric Terminal Railway Co., known as the McKinley System, to operate a line over certain streets of St. Louis for a period of 50 years. The route of the line is from the river front at Salisbury St. to Ninth St. over private property, between Farrar and Salisbury Sts., south on Ninth St. to Branch St., and thence to Twelfth St. and south on Twelfth to Lucas Ave., where the terminus of the road will be. The McKinley System is to construct a bridge over the Mississippi River from Salisbury St. to Venice, Ill., the cost of the bridge to be about $2,500,000. It is probable that contracts for construction will be let by the company in New York. The company promises under the franchises to carry express at freight rates and to reduce freight 40 per cent. The fare across the bridge from St. Louis to Granite City is to be 5 cents. The fare for foot passage over the bridge is to be 3 cents. In consideration of the franchise the company is to pay into the city treasury $5,000 annually for the first five years, $7,500 annually for the next ten years, and $10,000 annually for the remainder of the life of the franchise. L. E. Fischer is Gen. Mgr. of the Illinois Traction System (the McKinley System), at Danville, Ill.

SAPULPA, IND. T.—The City Council has granted Schmidt & Reynolds a franchise for an electric railroad from Sapulpa to the oil fields. The contract provides for commencement of work within 30 days or forfeiture of all rights will follow. The road will be about eight miles in length, reaching Kiefer and the Glenn oil field.

ROCKPORT, WASH.—The Cascade Consolidated Mining & Smelting Co., through a subsidiary corporation, the Cascade Valley Railroad Co., is to build a railroad from Rockport to its holdings in the northern part of the Chelan County. The survey is nearly completed, and grading, it is stated, is to begin this summer. The company is capitalized at $8[illegible]. W. A. C. Rowse, of Seattle, is Pres.

EVERETT, WASH.—A franchise has been granted by the Board of County Commissioners to the Puget Sound, Skykomish & Eastern Railway Co. to build an electric railway from Index to a point about 1½ miles from that place. The franchise also grants the right to construct telephone and electric light systems. Terms of the franchise provide that work must begin within 30 days and be completed within six months. M. Rudebek and E. H. Gule are the promoters of the project.

WATSONVILLE, CAL.—John B. Rogers, Ch. Engr. of the San Joaquin Valley Western Ry., 52 Eleventh St., San Francisco, advises us that surveys are in progress for the proposed line and that the contracts will be let on completion of location survey. Right-of-way is being obtained. Capital is partly secured. Thomas Flint, of San Juan Bautista, Cal., is Pres. As previously noted, this company was incorporated in California by Thomas Flint, of San Juan Bautista; C. G. MacBride, of San Jose, of the firm of Miller & Lux; Philip McRae, capitalist, of Hanford; C. P. May, Pres. of the Bank of Coalinga; James Shaw Robertson, capitalist; J. O. Hickman, Cashier of the First National Bank, Hanford; D. G. Hart, capitalist, Fresno; J. A. McClung, Jr., Fresno, and William M. Graham, Mgr. of the California Oil Fields, Ltd., Santa Barbara. The capital stock of the new road is $6,000,000, of which $250,000 has been subscribed. Charles A. Lee is General Counsel, and John R. Rogers, Ch. Engr. of the Ocean Shore Ry Co., has been appointed head of the engineering staff. The San Joaquin Valley Western is to start at a point in the city of Fresno and run to Mendota, thence westerly to Tres Pinos in San Benito County, northerly to Hollister and continue to Chittenden, Santa Cruz County; thence westerly to Watsonville, a distance of 140 miles. In addition, two branches are contemplated, one 40 miles in length, to Hanford, and a second, also 40 miles long, to Coalinga. The length of main line and branches is to be about 220 miles. At Watsonville the new line will meet the Ocean Shore Ry., with which a traffic arrangement will be effected that will allow unbroken connection between Hanford, Fresno, Coalinga and San Francisco.

RENO, NEV.—Charles Burke and D. C. Wheeler, of Reno, have asked the City Council for a franchise for an electric railroad running from the business portion of the city to an addition on the south side of the Truckee River.

LIGHT AND POWER PLANTS.

The names of parties awarded contracts are printed in capital letters.

PORTSMOUTH, N. H.—The Rockingham County Light & Power Co. is contemplating introducing a new system of electric lighting. This system will be installed soon. J. S. Witaker, Portsmouth, is Supt.

BOSTON, MASS.—The following bids were received 11 a. m., April 13, at the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for furnishing two 750-KW. turbo-generator units for the navy yards, Boston: General Electric Co., Schenectady, N. Y., $34,400, seven months; Westinghouse Machine Co., 10 Bridge St., New York, N. Y., $53,847, six months.

NEW YORK, N. Y.—Bids are asked until 3 p. m., April 25, by John W. Brannan, Pres. Bd. Trustees, Bellevue and Allied Hospitals, for repairs to brick work, feed and blow-off pipes and smoke connections on the boilers in the old power-house of the Bellevue Hospital, 26th to 28th St., First Ave., Boro. of Manhattan.

NEW YORK, N. Y.—Bids are asked until 11 a. m., April 29, by C. B. J. Snyder, Supt. School Bldgs., for installing electric equipment in new Public School No. 43, on westerly side of Brown Pl., between 135th and 136th Sts., Boro. of The Bronx.

NEW YORK, N. Y.—Bids are asked until 2 p. m., April 25, by J. W. Stevenson, Comr. of Bridges, for installing ventilating system and electrical equipment for the Manhattan subway station of the Williamsburg (new East River) Bridge, over the East River, between the Boros. of Manhattan and Brooklyn.

GOUVERNEUR, N. Y.—A franchise has been granted by the Village Board of Trustees to the Northern Light & Power Co., of Potsdam, N. Y. The franchise calls for completion of a power line to this place from Hannawa Falls within a year from the date of the agreement and at least 500 HP. must be delivered at that time.

FORT WOOD (New York post-office), N. Y. —Bids are asked by G. C. Burnell, Constr. Q. M., until June 1 for furnishing and installing electric light fixtures, etc., in certain buildings at this post.

EASTCREEK, N. Y.—Plans have been drawn for erection of a power plant near Ingham's Mills on East Canada Creek by the Eastcreek Electric Light & Power Co. East Canada Creek will supply the power which will drive the electric cars over the entire system of the Fonda, Johnstown & Gloversville R. R., as well as furnish power for Amsterdam, Johnstown and Gloversville. William A. Frederick, Eastcreek, is Supt. of the power company; J. N. Shannahan is Gen. Supt. of the railroad company, Gloversville, N. Y.

HADDONFIELD, N. J.—The municipality has commissioned J. H. Young to prepare plans for an electric light and water-works system for Haddonfield. Estimated cost, $125,000.

WASHINGTON, PA.—On account of the uncertainty of the supply of natural gas, the Jessop Steel Co., Gordon Extension, Washington, probably will install a gas producer plant. Edward L. Hand, 614 Market St., Philadelphia, is a Director.

ANNAPOLIS, MD.—EDWARD D. SKIPPER, of Annapolis, has secured contract for constructing a power-house for the Annapolis Water Co. The building will have two stories, and will be constructed of brick and concrete.

BALTIMORE, MD.—The United Railways & Electric Co., Continental Bldg., Baltimore and Calvert Sts., has awarded contract to NOEL CONSTRUCTION CO., Calvert and German Sts., for construction of electric substation at 708-710 West Lombard St. The station will have one story and will be 55 × 154 ft., brick with stone trimmings, reinforced concrete construction, metal frames and sashes, slag roof. Baldwin & Pennington, 330 North Charles St., are Archs.

BALTIMORE, MD.—Contract for constructing substation for the United Railways & Electric Co. awarded to M. C. DAVIS, 5 Hopkins Pl., Baltimore. William A. House, Continental Trust Bldg., is Gen. Mgr.

LAUREL, MD.—We are officially advised that the city is planning construction of electric light and gas plants and a sewer system, to cost in all $50,000. On account of the necessity of issuing bonds first, contracts will not be let until the first of next year. W. E. Gilbert is Mayor; Edward Phelps is a member of the City Council.

WASHINGTON, D. C.—Bids are asked until April 23 by the Bureau of Supplies and Accounts, Navy Dept., Washington, for furnishing certain electrical supplies at the navy yards or stations at Portsmouth, N. H.; Boston, Mass.; New York, N. Y.; League Island (Philadelphia), Pa.; Annapolis, Md.; Washington, D. C., and Norfolk, Va. E. B. Rogers is Paymaster-Gen., U. S. N.

RICHMOND, VA.—The Committee on Light is reported to have recommended the City Council to award contract for the complete rehabilitating of the gas works to the STACKY MFG. CO., of Cincinnati, Ohio, at $310,000, which includes everything except laying mains for conducting gas through the streets.

ROANOKE, VA.—The Roanoke Gas & Water Co., it is reported, proposes to install two new benches in gas house, and to lay about six miles of gas mains.

LINVILLE, N. C.—R. L. Wiede, C. E., Washington, D. C., is preparing plans for constructing a hydro-electric plant near Linville, which will cost, it is reported, about $1,500,000.

ANDERSON, S. C.—Bids are asked by J. R. Earle Development Co. for construction of proposed dam to develop water power on the Savannah River and for the necessary machinery. Dam will require 25,000 yds. of masonry and concrete, and will develop 6,000 KW. net for distribution by electricity. J. R. Earle is at Walhalla, S. C.

ALBANY, GA.—Bids probably will be received in June for constructing proposed plant of the Albany Power & Mfg. Co., noted in issue of April 4. Estimated cost, $600,000. J. E. Sirrine, Greenville, S. C., is Ch. Engr.

CHATTANOOGA, TENN.—The Chattanooga Electric Co. is preparing to make improvements, for which about $140,000 will be expended. New machinery will be installed, including 1,000-KW. generator, steam turbine, 500-KW. generator, four water-tube boilers of 410 HP., increasing present capacity of plant about 2,000 HP. Byron T. Burt is Gen. Mgr.

BRISTOL, TENN.—We are officially advised that Charles Hansel & Co., Engrs., 43 Exchange Pl., New York, have made a proposition through the Board of Trade to develop 4,000 HP. of electric energy at Fish Dam, on the Holston River, ten miles from Bristol. Theodore Swann and associates are organizing a distributing company to purchase this power and distribute it for light and power purposes. J. B. Peters, 22 Lee St., is Gen. Mgr., Bd. of Trade; N. B. ReMine is Secy.

YOUNGSTOWN, OHIO.—A power-house, to be built of brick, will be erected at the Ohio works of the Carnegie Steel Co., Carnegie Bldg., Pittsburg, Pa., at Youngstown. Included in the equipment will be four horizontal gas engines, contract for which has been awarded to the SNOW STEAM PUMP CO., 898 Ellicott Sq., Buffalo, N. Y.

DUNCAN FALLS, OHIO.—A light and power plant, it is reported, will be erected here at a cost of $50,000. J. W. Wineforder, Duncan Falls, is interested.

RUSHVILLE, IND.—Bids are asked by S. G. Gregg, City Clerk, until April 30 for two 250-HP. water-tube type boilers, of steel plate, to carry 160 lbs. steam pressure for the municipal water and light plant. Oliver Ong is Supt.

NEWCASTLE, IND.—Ambrose Petry, who recently took over the holdings of the Newcastle Light, Heat & Power Co., has selected a new site upon which to build and equip a new and larger plant to generate electricity for commercial purposes.

DANVILLE, IND.—Bids are asked by the Danville Heat, Light & Power Co. for constructing and equipping a heat, light and power plant. J. F. Lynch is Pres.

GALVESTON, IND.—The Town Board is considering plans for construction of an electric light and power plant.

GREENFIELD, IND.—The City Council has instructed the Mayor to contract for reconstruction of the city light plant and also for $27,500 worth of new machinery. R. R. Denny is Supt.; J. A. Warrick is Ch. Engr., both of Greenfield.

FORT WAYNE, IND.—We are officially informed that the Board of Public Works will receive bids until about June 12 for constructing a municipal electric light and power plant, for lighting the streets and public buildings, at a cost of about $160,000. The power plant will be for operating two 500-KW. turbine units or three 250-KW. generators. About 420 arc lamps will be erected upon the streets. Plans and specifications will be completed about May 4. William J. Hosey is Mayor; Owen Ford, Security Bldg., St. Louis, Mo., is Consult. and Superv. Engr.

MILWAUKEE, WIS.—Bids probably will be called for in about three weeks for constructing gas producer plant for municipal electric light plant. Estimated cost, $300,000. H. S. Bowen, Milwaukee, is Engr.; Charles G. Poetsch is City Engr.

PRAIRIE DU SAC, WIS.—Among those interested in construction of a dam across the Wisconsin River, to cost $1,500,000, are: J. S. Tripp, of Prairie due Sac; Robert Buer, of Sauk City, Iowa; M. A. Devitt, of Chicago, Ill., and Magnus Swenson, of Madison, Wis.

DES MOINES, IOWA.—Bids are asked until April 24, at the office of J. C. Simpson, Secy. Iowa State Capitol, for furnishing boiler, engine generator, arc lights, etc., for improvement of the electric light and power system of the State Fair Grounds, Des Moines.

CHISHOLM, MINN.—The electric light plant in this town has been purchased by A. McMillan, of Grand Rapids, Mich. Mr. McMillan contemplates improvements to the plant involving an expenditure of $25,000.

PARSONS, KAN.—The PARSONS ELECTRIC LIGHT & POWER CO. has been awarded contract for lighting the streets and city institutions for a period of five years. F. E. Workman, Parsons, is Secy. and Mgr.

LAKIN, KAN.—Waterman & Thorpe have secured an electric light franchise from the City Council and propose to install a plant of 600 or 800-lamp capacity. They will furnish electricity for lighting the streets and residences in this city.

OKLAHOMA, OKLA.—An expenditure of $500,000 will be made by the Oklahoma Heat, Power & Refrigeration Co. in the erection of buildings and the construction of pipe lines in this city. Carl E. Porterfield is Gen. Mgr.

JUNCTION CITY, ORE.—The Howard Electric Light Co. is considering the question of installing a turbo-generator set and an extra boiler in its plant. B. F. Howard, Junction City, is Mgr.

ASTORIA, ORE.—The Astoria Electric Co. has awarded contract to W. S. DOLE & CO., Portland, Ore., for the construction of its new gas plant here, to cost $12,000. C. A. Coolidge is Gen. Supt.

BONANZA, ORE.—The proposition of A. D. Harpold to secure exclusive franchises for period of 50 years for supplying town of Bonanza with electric light and water has been ratified by the citizens. Water will be pumped from springs on the Bowne land. Water franchise will be awarded to F. J. Bowne and assigned by him to Mr. Harpold.

SAN FRANCISCO, CAL.—The San Francisco Coke & Gas Co., 914 O'Farrell St., is reported to have decided to increase its bonded indebtedness from $2,500,000 to $7,500,000, for the purpose of allowing an extension of the company's mains, adding to the gas plant, and also to install a plant to manufacture and furnish electricity throughout San Francisco. The company's name will be changed to the Metropolitan Light & Power Co. Leopold Michels is Pres.

TUCSON, ARIZ.—At a meeting of the Board of Directors of the Tucson Gas, Electric Light & Power Co. it was decided to increase the capital stock to $500,000, in order to provide for future construction, equipment. William S. Iliff, Colorado Bldg., and Charles W. Durbin, both of Denver, are Directors; F. E. Russell, Tuscon, is Mgr.

QUEBEC, QUE.—The Frontenac Gas Co. has made arrangements to install a plant to cost about $1,000,000.

MONTREAL, QUE.—The contract for the erection of a fine new power-house for the Montreal General Hospital was awarded recently to C. E. DEAKIN, 11 St. Sacrament St., Montreal, $80,000. Construction will be started directly. T. Pringle & Son are Engrs.-in-Charge. It is intended to spend about $500,000 on the hospital, in rebuilding and improvements.

COBALT, ONT.—The Beach Bros. Co., Haileyburg, Ont., writes us that it has two power sites on the Montreal River, of 3,000 HP. each. The one at Hound Chute is but four miles from Cobalt, and the other, at Fountain Falls, is seven miles from Cobalt. The company is developing Hound Chute now for the Cobalt Power Co., Ltd., which will transmit the power to Cobalt, and to Haileyburg, nine miles distant, for light and power purposes. The specifications for electric and hydraulic machinery will be ready soon, when bids will be asked for. The estimated cost of Hound Chute development is about $200,000. The bulk of this power will be taken by the different Cobalt mines, and as soon as the market demands, Fountain Falls will be developed.

BRIDGES.

The names of parties awarded contracts are printed in capital letters.

WATERTOWN, MASS.—Plans and specifications for furnishing cut granite and constructing Galen St. bridge and wing walls at Charles River are on file at office of Engineering News, New York. Bids are asked until April 26. Wilbur F. Learned is Town Engr. (Advertised, Engineering News.)

CHESTER, PA.—The County Commissioners are reported to have awarded contract for constructing bridge over Darby Creek to connect Prospect Park and Tinicum Township to the MASSILLON BRIDGE CO., of Toledo, Ohio, for $68,500.

POTTSVILLE, PA.—Bids are asked by Charles T. Strauglin, County Controller, until May 1, for erecting steel bridge across Little Schuylkill River in West Brunswick Township.

SCRANTON, PA.—Bids are asked by E. A. Jones, Comptroller, until April 29, for constructing ten steel girder bridges with concrete foundations throughout the county.

NORRISTOWN, PA.—Bids are asked by the County Commissioners until April 20, for constructing two bridges.

FAYETTEVILLE, N. C.—The Board of County Commissioners are reported to have awarded contract for constructing steel bridge over Lock's Creek to the OSWEGO BRIDGE Co., of Oswego, N. Y., for $6,350.

PENSACOLA, FLA.—Bids are asked by the Board of County Commissioners, A. M. McMillan, Clk., until 7:30 P. M., June 4, for erecting steel bridge across Little Bayou, near Pensacola. (Advertised, Engineering News.)

TAMPA, FLA.—The Board of County Commissioners, W. L. Parker, Chn., and the Tampa Electric Co., P. O. Knight, Vice-Pres., will unite in erection of bridge across Hillsborough River at Michigan Ave., each to bear an equal part of expense.

GUEYDAN, LA.—A bridge may be constructed across Bayou Queue de Tortue near this place.

BENTON, TENN.—The County Court has appropriated $12,000 for erecting bridge at Murney Station. The CONVERSE BRIDGE CO., of Chattanooga, secured contract.

JONESBORO, TENN.—Bids are asked by the County Court until April 27, for constructing steel bridge across Nolachucky River at Deaderiah's Ford.

KNOXVILLE, TENN.—Bids are being received by the Board of Public Works for repairing bridges. Estimated cost, $20,000. W. C. Crozer is City Engr.

LOUISVILLE, KY.—We are officially advised that the following bids were received April 8 by Capt. H. Burgess, U. S. Engineers, for furnishing and delivering steel or w.-i. trestles for Boule dam: Griffiths Iron Works Co., St. Louis, Mo., $23,724; Atlanta Machine Works, Atlanta, Ga., $43,610; Penn Bridge Co., Beaver Falls, Pa., $48,521; New Jersey Foundry & Machine Co., 9 Murray St., New York, $43,561; G. & W. Mfg. Co., 26 Cortlandt St., New York, $32,442 and Charles Hegewald Co., New Albany, Ind., $30,262. Itemized bids are given this week under Contract Prices.

GREENFIELD, OHIO.—Bids will soon be asked for rebuilding lower bridge over Paint Creek. Estimated cost, $3,000.

YOUNGSTOWN, OHIO.—A viaduct will be erected at Spring Common grade crossing jointly by the city and the Pennsylvania R. R. Co. Frank M. Lillie is City Engr.

LANCASTER, OHIO.—Bids are asked until April 20 by the Board of County Commissioners for furnishing material and constructing two abutments for the E. Main St. bridge and two abutments for the South Columbus St. bridge. Fred L. Mauger is County Audr.

CLEVELAND, OHIO.—Bids are asked by the Board of County Commissioners, Julius C. Dorn, Clk., until 11 a. m., May 4, for constructing concrete abutment, Middleburg Township, and concrete abutment, Brecksville Township. A. B. Lea is County Surv.

DAYTON, OHIO.—The County Commissioners have let contracts for constructing abutments as follows for the following bridges in Miami Township: Groby bridge, JAMES MANUEL, $7 per cu. yd.; Benner bridge, JAMES MANUEL, $6.70 per cu. yd.; Ninth St. bridge, J. H. MORRISON, $6.40 per cu. yd.

COVINGTON, IND.—Bids are asked by the County Commissioners until noon, May 7, for constructing (A) 21-ft. span concrete bridge, (B) approaches to 30-ft. steel bridge, (C) 8-ft. concrete arch, and (D) concrete abutments. W. B. La Baw, at Veedersburg, is County Surv.

VEEDERSBURG, IND.—Bids are asked until 8 p. m., May 1, by the City Clerk, for improving Mill St. arch.

GREENSBURG, IND.—Bids are asked by the County Commissioners until May 6 for constructing bridge near Morton Christy's residence. F. E. Ryan is County Audr.

KOKOMO, IND.—The County Commissioners have awarded contract to I. E. SMITH, of Richmond, Ind., for constructing Boyd bridge in Monroe Township; Kenton bridge, Howard Township and Honey Creek bridge, Monroe Township. William L. Benson is County Audr.

Bids are asked by the County Commissioners until 11 a. m., May 8, for erecting two reinforced concrete bridges, one in Monroe and another in Harrison Township.

PRINCETON, IND.—Bids are asked by the Board of County Commissioners until 2 P. M. May 7, for moving and erecting bridge across Richland Creek, including filling, excavating and embanking. Harry R. Embree is County Audr.

ST. JOSEPH, MICH.—The City Council has voted to bond the city for $100,000 for improvements, of which $30,000 is to be used for erecting a bridge across St. Joseph River.

URBANA, ILL.—The CONTINENTAL BRIDGE CO., Monadnock Bldg., Chicago, Ill., has been awarded contract for constructing bridge across Lone Slough.

AURORA, MINN.—The CONTINENTAL BRIDGE CO., Monadnock Bldg., Chicago, Ill., has secured the contract to construct 120-ft. steel span bridge over St. Louis River, near Aurora, at $3,395.

PURCELL, IND. T.—The Oklahoma Central R. R. Co. will erect bridge across South Canadian River between Purcell and Lexington, Okla. F. C. Hand, at Purcell, is Ch. Engr. Const.

RICHLAND, WASH.—The contract for rebuilding bridge destroyed by flood has been awarded to C. E. LUM, of North Yakima, Wash., at $9,900. The bridge to have two 160-ft. spans. The Northwest Bridge Co., of Tacoma, Wash., bid $10,700.

PERRY, ORE.—P. S. EASTERDAY & CO., of Walla Walla, Wash., have been awarded contract for constructing 150-ft. steel span bridge with steel tubular piers across Grand River, at $6,914. J. B. Gilham is County Clk.

MILWAUKEE, ORE.—The Oregon Water Power & Ry. Co. is preparing to build bridge across Johnson Creek at Milwaukee, to replace the present structure. G. C. Fields, at Portland, is Supt.

TILLAMOOK, ORE.—Bids are asked by the County Court until 5 p. m., May 1, for constructing combination steel bridge, with 119-ft. span and approaches 288 ft. long. G. B. Lamb is County Clk.

LOS ANGELES, CAL.—Plans have been prepared for constructing viaduct to replace Buena Vista St. bridge. H. G. Parker is City Engr.

OTTAWA, ONT.—Bids are asked by P. E. Ryan, Secy. Transcontinental R. R. Commission, until noon, May 1, for constructing six steel bridges along route of National Transcontinental R. R.

GREENOCK, ONT.—Bids are asked by J. J. Donnelly, Township Clk., until noon, April 22, for erecting one 90-ft. span steel bridge across Teeswater River, Concession 6 Greenock, and one 100-ft. span bridge over Teeswater River, Concession 14 Greenock. Bids also are asked for constructing concrete abutments for both bridges.

BUILDINGS.

The names of parties awarded contracts are printed in capital letters.

AUGUSTA, ME.—It has been announced that land adjoining the Augusta post-office has been acquired upon which to construct an extension to the post-office, for which an appropriation of $150,000 has been made. With the addition the building will have a frontage of 158 ft. on Water St. James Knox Taylor, Washington, D. C., is Superv. Arch.

BOSTON, MASS.—The contract for the new building for the Boston Museum of Fine Arts will be let shortly, according to an announcement in the institution's annual report, just issued. The building will be erected in Huntington Ave. and will stand on a 12-acre plot.

NEW YORK, N. Y.—The following bids were received by the Park Dept. for furnishing material and erecting an elephant house in the New York Zoological Park, Bronx Park: Luke A. Burke & Sons, 25 West 42d St., $153,750; Thomas Cockerill & Son, 147 Columbus Ave., $179,000; Guidone & Galardi, 1 Madison Ave., $187,550; Richard E. Heningham, 1 Madison Ave., $163,376; Kelly & Kelley, Inc., 45 East 42d St., $179,762; Thomas B. Leahy Bldg. Co., 1 East 42d St., $163,763; F. T. Nesbit & Co., Inc., 116 Nassau St., $149,975; John H. Parker Co., 225 Fourth Ave., $205,000; Daniel J. Ryan, $190,990; Patrick Sullivan, $218,750, and Thomas J. Waters, $160,000. Moses Herrman is Pres.

Bids are asked until 2:30 p. m., April 23, by Robert W. Hebberd, Comr. of Public Charities, for erection of a residence for the superintendent, a residence for the medical staff, and a dining hall and kitchen building in connection with the City Hospital at Blackwell's Island.

NEW YORK, N. Y.—Bids are asked until 11 a. m., April 29, by C. B. J. Snyder, Supt. of School Bldgs., for installing heating and ventilating apparatus for additions to and alterations in Public School No. 83, on west side of Schenectady Ave., between Bergen and Dean Sts., Boro. of Brooklyn; for general construction, etc., of additions to and alterations in Public School No. 3, on south side of 157th St., about 233 ft. east of Courtlandt Ave., Boro. of the Bronx, and for alterations and repairs to various schools throughout the city.

The following bids were received April 15, by C. B. J. Snyder, for general construction, etc., of new Public School No. 154, on the southerly side of Eleventh Ave., between Sherman and Braxton Sts., Boro. of Brooklyn: Thomas McKee, 521 West 110th St., $185,473; Arci Construction Co., 99 Broadway, Brooklyn, $189,450; George Hildebrand, 38 Park Row, $195,844; Thomas Cockerill & Co., 147 Columbus Ave., $194,500; Clarke & Stowe, 221 Greenpoint Ave., Brooklyn, $182,300; P. J. Ryan, 314 West 44th St., $197,035; Peter Cleary, 235 Bainbridge St., Brooklyn, $188,671.

NEW YORK, N. Y.—Bids are asked until 11 a. m., April 22, by C. B. J. Snyder, Supt. School Bldgs., for alterations, repairs, etc., for Public Schools Nos. 13, 19, 20, 25, 35, 40, 50, 79 and 122, Boro. of Manhattan; for alterations, repairs, etc., to Public Schools Nos. 11, 12, 14, 15, 68, 71, 72, 74, 75 and 81, Boro. of Queens, and for the general construction, etc., of additions to and alterations in Public School No. 16, on Matilda and Catherine Sts., about 150 ft. south of East 240th St., Wakefield, Boro. of the Bronx.

The following bids were received April 11 by the Park Board for work and materials for erection and completion of the interior finish in the New York Public Library, Astor, Lenox and Tilden foundations, Fifth Ave., 40th and 42d Sts. John Pierce Co., 277 Broadway, $3,133,000; Allied Crafts Co., 150 Fifth Ave., $4,485,000; John Dwyer, 139th St. and Amsterdam Ave., $3,296,000; Norcross Bros., 160 Fifth Ave., $3,688,000; Snare & Triest Co., 143 Liberty St., $3,888,000; R. E. Heningham, 1 Madison Ave., $3,487,500; P. J. Carlin Construction Co., 1 Madison Ave., $3,874,000.

Plans have been filed with the Building Superintendent for a 6-story apartment house to be built at the corner of Broadway and 137th St. for the Charter Construction Co. It is to have a frontage of 99.11 ft. and a depth of 115 ft. with a facade of ornamental brick and stone and will have accommodations for 39 families. It is to cost $215,000. Emery Roth, 20 East 42d St., is Arch.

NEW YORK, N. Y.—Bids are asked until 3 p. m., April 25, by John F. Ahearn, Pres. Boro. of Manhattan, for erection and completion of a public bath building at Nos. 342, 346 and 348 East 54th St., Boro. of Manhattan.

It has been announced at the Borough Hall, in Brooklyn, that the plans of Low & Hawlett for the new $7,000,000 10-story municipal building to face on Joralemon, Court and Livingston Sts., have been approved by the Municipal Art Commission, and an application will be made soon to the Board of Estimate for funds to start the work. The Polytechnic Institute buildings in Livingston St. are included in the property to be condemned. Their estimated value is about $725,000. It is understood that the new site for the Polytechnic will be on the Eastern Parkway in the vicinity of the Museum of Arts and Sciences. Bird S. Coler is Pres. Boro. of Brooklyn.

ALBANY, N. Y.—Bids are asked by the Trustees of Public Buildings, the Capitol, Albany, until noon, April 24, for removing buildings and clearing the site for the new educational building. The site comprises the large city block bounded by Washington Ave., Hawk, Lafayette and Swan Sts., and is covered by buildings of three and four stories in height. Robert H. Fuller is Secy. of the Trustees. The work must be commenced May 1 and completed by Aug. 1.

The First National Bank of Albany is planning erection of a 7-story structure. The front of the building probably will be of granite. A committee of three has been appointed to consider plans for the structure. Frederick A. Mead, Albany, N. Y., is the Pres. of the bank, as now organized.

WATERTOWN, N. Y.—The Directors of the New York Central & Hudson River R. R. Co. propose erecting a depot here to cost about $250,000. A. Forsyth is Superv. Bridges and Bldgs., Watertown.

SYRACUSE, N. Y.—We are officially advised that contract for erection of the gymnasium for Syracuse University has been awarded to the CONSOLIDATED ENGINEERING & CONSTRUCTION CO. The building is 200 × 150 ft., and will cost approximately $250,000. It will be steel skeleton fireproof construction. The offices of the construction company are at the Syracuse Savings Bank Bldg., Syracuse.

TOMPKINSVILLE, N. Y.—Bids are asked until 1 p. m., May 20, at the office of the Light-House Engineer, Tompkinsville, N. Y., for constructing a lamp-shop at the Light-House Depot, Tompkinsville. Major Charles Potter, Corps Engrs., U. S. A., is Engr. Third Light-House District. (Advertised, Engineering News.)

FAIRVIEW, PA.—The erection of a State Hospital for the Criminal Insane at Fairview is reported under consideration. Probable cost, $150,000. C. J. M. Shirk, of Philadelphia, is Arch. for the Comn.

PITTSBURG, PA.—Bids are asked by the Italian-American Construction Co., 4755 Laurel Ave., Pittsburg, for constructing a row of six brick houses on Joseph St., East End. N. A. Pacella is Secy.

WASHINGTON, D. C.—Bids are asked until 2 p. m., May 13, by Capt. John Stephen Sewell, Constructing Officer, for erecting two sets of Officers' Quarters and for excavating for construction of wire fences about the Soldiers' Home grounds. (Advertised, Engineering News.)

Bids were received April 12, at the office of the Superv. Arch. of the Treasury, Washington, for removing the sandstone columns and front on the east side of the Treasury Building, Washington, and substituting granite. Bids were: Edwin Gilbert & Co., Land Title Bldg., Philadelphia, $298,965, Dec. 1, 1908; Charles F. Parsons, 1044 Westchester Ave., New York, $349,000, 20 months; James L. Parsons, 13½ St. and Pennsylvania Ave., N. W., Washington, $429,300, two years; Henry Smith & Sons Co., Mount Royal Ave. and Lanval St., Baltimore, Md., $354,440, as specified; Thomas Dwyer, Amsterdam Ave. and 139th St., New York, $641,300, no time; Booth Bros. & Hurricane Isle Granite Co., 207 Broadway, New York, $407,000, 450 working days; John Peirce Co., 277 Broadway, New York, $337,900, as specified; George A. Fuller Co., Fuller Bldg., New York, $335,000, Dec. 1, 1908.

DURHAM, N. C.—The members of the Main St. Methodist Church, it is reported, will erect a $130,000 church. B. W. Duke is Trustee.

FORT SCREVEN, GA.—Bids are asked until noon, May 15, by Lieut.-Col. Dan C. Kingman, Corps Engrs., U. S. A., for constructing one torpedo storehouse, one cable tank, addition to mining casement, one loading room, one double primary station and one double secondary station. (Advertised, Engineering News.)

BIRMINGHAM, ALA. — The EVANS BROTHERS CONSTRUCTION CO., of Birmingham, has secured the contract for constructing a 4-story warehouse, 140 × 250 ft., at Ave. A and 18th St., for the Wimberly & Thomas Hardware Co. Estimated cost, $150,000.

NEW ORLEANS, LA.—New bids for the construction of the proposed depot for the New Orleans Terminal Co. at Basin and Canal Sts. will be asked for. Bids on this work were received at a previous date, the lowest being $220,000 and the highest $250,000. W. C. Dotterer, New Orleans, is Gen. Mgr.

LOUISVILLE, KY.—We are officially advised that Mann & MacNeille, Archs., 2 East 33d St., New York, N. Y., will have charge of constructing a 15-story office building in Louisville. Estimated cost, $600,000.

INDIANAPOLIS, IND.—A contract has been awarded to the BEDFORD STONE & CONSTRUCTION CO., Traction Terminal Bldg., of this city, for the construction of the New Grand Opera House, on Pennsylvania St., for $115,000.

ROCKFORD, ILL.—Bids are asked until 3 p. m., May 14, by James Knox Taylor, Superv. Arch., for construction of extension to U. S. post-office at Rockford. (Advertised, Engineering News.)

CHICAGO, ILL.—Huehl & Schmid, Archs., 163 Randolph St., have prepared plans and will take figures on a Masonic Temple to be built on the west side of Oakley Ave., 125 ft. south of Madison St., for the West Chicago Masonic Association. It will have four stories and will stand on a lot 141 × 170 ft., be of fireproof construction, have pressed brick and stone front, composition roof, hardwood finish, steam heat, marble and mosaic work, wiring for electric light, the latest improvements, and cost $150,000.

Holabird & Roche, Archs., Monadnock Block, are working on preliminary plans for a new building to replace the Sherman House, the cost of which is estimated at $2,000,000.

BUTTE, MONT.—Link & Haire, Archs., Silver Bow Block, Butte, have completed the plans for a new 5-story Y. M. C. A. building to be built on Alaska and Granite Sts., at a cost of $240,000.

ST. LOUIS, MO.—The McKinley Interurban Railway System, which has obtained a franchise in St. Louis through its local terminal organization, the St. Louis Electric Terminal Ry. Co., will invest $5,000,000 in land and improvements in St. Louis. Plans have been prepared by Ralph Modjeska for the new bridge across the Mississippi River. A passenger station to be built at Twelfth, Thirteenth, Gay and Linden Sts. will cost at least $200,000. The other buildings and construction will cost about $1,600,000. W. B. McKinley, Champaign, Ill., is Pres. of the McKinley system; L. E. Fischer, Danville, Ill., is Gen. Mgr.

What will be known as the Navarre Building will be erected at the corner of Sixth and Chestnut Sts. The work of wrecking the old building and excavating the site will begin this week, and the structure will be completed about the end of the year. It will be a 10-story store and office building, fronting 49 ft. on Sixth and 127 ft. on Chestnut St., with seven stores fronting on Chestnut and one on Sixth St. The upper floors will be divided to suit the tenants. Three high-speed elevators will be installed. The framework is to be mostly of reinforced concrete. The contract for the erection of the building has been awarded to the F. J. REMMERS BUILDING & CONSTRUCTION CO., 805 Cass Ave. Mariner & Le Baume, Chemical Bldg., are Archs. It is being erected for the Navarre Building Co., of which Richard A. Boyle, 800 Chestnut St., is Pres.

KANSAS CITY, MO.—We are officially advised that contracts for constructing a 12-story building to be erected at Eleventh and Walnut Sts., will not be let until January, 1908. The structure will be 48 or 96 × 110½ ft., of stone or brick fireproof construction. H. R. Wilson, 218 La Salle St., Chicago, is Arch.

EL PASO, TEX.—Dr. E. R. Carpenter, H. Austin, W. F. Payne, W. J. Fewel and C. N. Bassett are reported to have organized a company and purchased a lot at the corner of Magofflin and San Antonio Sts. and will erect a 6-story business and apartment house block. Estimated cost, $125,000.

TACOMA, WASH.—John C. Donnelly and Edmund Croft contemplate erecting a hotel on C St. to contain 1,000 rooms and to cost about $750,000.

SEATTLE, WASH.—We are officially advised that plans for the superstructure of the church to be built for the congregation of the First Methodist Church, at Fifth Ave. and Marion St., have not been completed. The contract for work on the basement will be let in a few weeks. The building will be 105 × 116 ft., constructed of brick and terra-cotta. Cost of building, $125,000; furnishings, $25,000. James H. Schack, Downs Block, is Arch.

Plans are being prepared for a building to be erected here for Y. W. C. A. which will cost $300,000. The structure will be situated west of Sixth Ave. It will contain a gymnasium, a swimming tank and a roof garden.

SAN FRANCISCO, CAL.—Edward Rolkin, Oak and Stanton Sts., has applied for a permit to erect a five-story brick hotel building on the corner of Larkin and McAllister Sts., at a cost of $300,000.

A mercantile building is to be erected at the corner of Essex and Oxford Sts. on a lot owned by the heirs of Atherton T. Brown and numbered 73 to 79 Essex St. and 2 to 8 Oxford St. The new building will be erected from plans by Allen & Collins, which call for a structure eight stories high, fireproof and costing about $250,000. The construction will be granite to the third story, the other five stories being of brick with brick cornices. The skeleton will be of steel and the floors of heavy concrete. It will cover an area of 8,000 sq. ft., valued at $175,000. There will be a frontage of 75 ft. on Essex St. and 136 ft. on Oxford St.

SAN FRANCISCO, CAL.—Plans have been completed by Lewis P. Hobart, 1860 Webster St., for four Class A steel frame buildings, to be erected on sites owned by the Crocker family on sites in the burnt district.

The Belden Building, which will cover a lot 60 × 68.9 ft. owned by the Crocker Estate Co., on the corner of Bush and Montgomery Sts., is to be of steel frame, ten stories in height, faced with buff brick and trimmed with terra-cotta, and will have a wrought-iron front. The entire building will be fitted with metal doors and sashes and no wood will be used except where it is absolutely necessary. The superstructure of the floors will be of reinforced concrete. Cost, $500,000.

The Cosmopolitan Building is to be erected by the Crocker Estate Co. on the corner of Bush and Sansome Sts. It will be ten stories high and will be partly of Class A and partly of Class C construction. The contract has been let to MAHONEY BROS., St. Francis Hotel, who have begun work upon it, and who expect to have it completed about Dec. 1. The entire building, which is to cost about $600,000, will be occupied by the Moore-Watson Dry Goods Co., of Los Angeles.

The Jewelers' Building, which is to be built for the Crocker Estate Co., is to be a restoration of the old Sloan Building in Post St., betweent Kearny St. and Grant Ave., which was almost entirely wrecked by the fire. The restoration, which amounts practically to a new building, will cost $400,000. It will be seven stories in height, of steel frame, with gray brick and terra cotta facing, and front of wrought iron.

The Battery Building, which is to be erected on the lot 80 × 92.6 ft. owned by Jennie A. and C. T. Crocker at Bush and Battery Sts., will be ten stories high, built of steel, buff brick and terra-cotta, and will be Class A. The building will cost appr[illegible]tely $800,000 and will be equipped with [illegible]ee high-speed electric elevators.

SAN JOSE, CAL.—Bids [illegible] asked until May 15, for constructing s[illegible] in this city as follows: One to cost [illegible]00; four to cost $50,000, and one to co[illegible]0,000. F. S. Allen, Pasadena, Cal., is A[illegible]

WHIPPLE (Prescott pos[illegible]ce), ARIZ.—Bids are asked by Charles [illegible] Walcutt, Jr., Q. M., until 3 p. m., May 17 [illegible] constructing bowling alleys, post exchang[illegible] gymnasium at Whipple Barracks, Ariz. [illegible]vertised, Engineering News.)

OTTAWA, ONT.—The Co[illegible]ate Institute Board will build an additio[illegible] the present structure which will acc[illegible]odate 1,200 pupils this year. Cost, about [illegible]0,000.

OWEN SOUND, ONT.—We [illegible] officially informed that the contract for [illegible] construction of the public building at O[illegible] Sound has been awarded to NAGLE & [illegible]LLS, of Ingersoll, Ont. Fred Gelinas, O[illegible]wa, is Secy., Dept. of Public Works.

KENORA, ONT.—The Ke[illegible]a Tourist's Hotel Co. has been formed h[illegible] to erect an hotel here to cost $150,000. [illegible] F. Bunnel, Winnipeg, Man., is interested.

WINNIPEG, MAN.—Bids a[illegible] asked until noon, April 22, by V. W. Horw[illegible], Arch., 177 McDermott Ave., for erection [illegible] an apartment block, 134 × 134 ft., here.

Hooper & Walker, Archs., M[illegible]ntyre Block, have completed plans for the [illegible]w provincial jail to be erected in South Win[illegible]peg at a cost of $110,000. Hon. Robert Rogers is Minister of Public Works, Winnipeg.

WETASKIWIN, ALTA.—The City Council has selected a site upon which to erect a hospital at a cost of $150,000. Duncan McEachern is Mayor.

WATER SUPPLY—IRRIGATION.

WALTHAM, MASS.—The following bids have been received for installing engine at the pumping plant: Allis-Chalmers Co., Milwaukee, Wis., $26,000; The Snow Steam Pump Works, Snow and Roesser Aves., Buffalo, N. Y., $24,890, and Platt Iron Works Co., 100 Broadway, New York, $24,015 and $24,215 for larger engine. Bertram Brewer is City Engr.

NEW YORK, N. Y.—Bids are asked by the Dept. of Water Supply, Gas and Electricity, John H. O'Brien, Comr., until 2 p. m., April 24, for furnishing, delivering and laying water mains in various streets.

CARTHAGE, N. Y.—Bids are asked by the Board of Water Commissioners, P. R. Wrape, Pres., until noon, April 29, for furnishing approximately 2,900 short tons of c.-i. pipe and four tons of special castings for conduit lines. Eaton & Brownell, of this city, are Engrs. (Advertised, Engineering News.)

NIAGARA FALLS, N. Y.—The City Engineer is preparing plans for constructing water supply system. Estimated cost, $400,000.

YONKERS, N. Y.—We are officially advised that contracts for constructing water filtration plant, consisting of two covered masonry sand filters and appurtenances, have been awarded by the Board of Water Commissioners, A. W. Kingsbury, Clk., as follows: M. J. DRUMMOND & CO., 182 Broadway, New York, furnishing pipe and special castings. The EDDY VALVE CO., furnishing gates and appurtenances. The SIMPLEX VALVE & METER CO., 112 North Broad St., Philadelphia, Pa., furnishing indicating apparatus. The SESSIONS FOUNDRY CO., Bristol, Conn., furnishing manhole castings.

WATERVILLE, N. Y.—Bids are asked until 7 p. m., May 13, by the Board of Water Commissioners, for constructing a 25,000,000-gallon reservoir, and pipe line connecting it with the present water system. Earl Conger is Clk. (Advertised, Engineering News.)

HADDONFIELD, N. J.—See under Light and Power Plants.

WASHINGTON, D. C.—The Bureau of Yards and Docks, Navy Dept., has awarded to the MIDLAND BRIDGE CO., Kansas City, Mo., contract for construction of 100,000-gallon water tower and tank, at $8,782, at Naval Hospital, New Fort Lyon, Bent County, Colo.

CHESTER, S. C.—Bids are asked by James McLarmon, City Clk. and Treas., until April 20, for constructing stone and concrete dam at pumping station on Sandy River.

PENSACOLA, FLA.—Bids are asked by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., until 11 a. m., May 4, for furnishing boilers and accessories at navy yard, Pensacola.

GUNTERSVILLE, ALA.—Contract for construction of water-works has been awarded to SULLIVAN & LONG, Bessemer, Ala., at $13,100. The water supply will be obtained from boiling spring near the city and will be pumped into reservoir having an elevation of 140 ft.

PRENTISS, MISS.—A water-works system will be constructed. Cost, $15,000.

COLUMBUS, MISS.—Bids are asked until May 7 for laying 2½ miles 6 and 8-in. water mains. E. S. Donnell is Mayor. Kirkpatrick & Johnson, at Jackson, Miss., are Engrs.

CROWLEY, LA.—The City Council has let contract for laying water mains to P. H. POERTER of Laurel, Miss. Ar[illegible]s Durio is Supt. Water-Works.

CLEVELAND, OHIO.—The Board of Public Service has awarded contract to the GREAT LAKES DREDGE & DOCK CO., Commerce Bldg., Chicago, Ill., for removing temporary crib No. 1 of water-works tunnel, at $19,800. W. J. Carter is City Engr.

LEBANON, IND.—Bids are being received by the Board of Public Works for rebuilding and re-equipment of water-works. E. G. Coulson is Engr.

NORTH CHICAGO, ILL.—Bids are asked by the Bureau of Navigation, Navy Dept., Washington, D. C., until noon, May 1, for extending water-supply mains at Naval Training Station, Great Lakes, North Chicago, Ill. Specifications are on file at office of Engineering News, New York.

EMMETTSBURG, IOWA.—Contracts for constructing drains have been awarded as follows: Open ditch work, Dist. 7 and 6, containing 52,000 cu. yds. and 52,700 cu. yds. respectively, to R. H. McWILLIAMS, of Clarion, Ia., at 13½ cts. per yd., or $7,141 and $7,114, respectively; tile work and material for Dist. No. 7, to H. C. SHADBOLT, Emmetsburg, Ia., for $3,230, and tile and material for Drainage Dist. No. 14, to LA GUE & KR[illegible]E, Spencer, Ia., for $6,271. S. R. Stedman, County Audr.

STAPLES, MINN.—The date for receiving bids for constructing water-works and sewerage system has been changed from April 23 to April 25. (Advertised, Engineering News.)

TILDEN, NEB.—Plans and specifications for constructing water-works system are being prepared by the Iowa Engineering Co., of Clinton, Iowa.

GREAT FALLS, MONT.—We are officially advised that the following bids were received April 3 by the U. S. Reclamation Service for constructing twelve miles of main canal, 67 miles of laterals and 17 miles of waste water ditches near Great Falls, Divisions 1 to 5, inclusive, all Schedule A: J. C. Furman, Augusta, Mont., Div. 2, $24,700. C. E. Crepeau, Ft. Benton, Mont., Div. 2, $29,600; Div. 4, $25,310; Div. 5, $24,055. Sequist, Clark & Johnson, Simms, Mont., Divs. 3, 4 and 5, $30,240, $2[illegible],390 and $23,740, respectively. Bailey & Dupee, Great Falls, Mont., Divs. 3, 4 and 5, $30,035, $23,735 and $19,720, respectively. The work consists approximately of 481,000 cu. yds. of excavation, 1,200 cu. yds. of concrete, 900 cu. yds. of paving and riprap, 20,000 B. M. of lumber, placing 182,000 lbs. of steel, and furnishing such other material and performing such work as may be necessary for completing the work. Itemized bids are given this week under Contract Prices.

BESSIE, TEX.—The Bessie Land & Water Co., which is building canal at Bessie, 19 miles above Brownsville, has been reorganized as the San Benito Land & Water Co., with a capital stock of $500,000. The chief stockholders are Heywood Brothers, of Jennings, La.; W. H. Stenger, of the same firm; R. L. Batts, of Austin; E. F. Rowson, of Houston, and S. A. Robertson, of Brownsville. The officers are Alba Heywood, Pres.; W. H. Stenger, Vice-Pres.; Ed F. Rowson, Treas.; Alba Heywood, W. Scott Heywood, O. W. Heywood, A. S. Robertson, W. H. Stenger and R. L. Batts, Directors. The first assessment of $100,000 is paid in and work on the canal and pumping plant is being pushed rapidly.

WHITNEY, TEX.—Bids are being received by B. F. Grantham, of this city, for digging artesian well not over 1,100 ft. deep.

GALVESTON, TEX.—Bids are asked by the Board of Commissioners until noon, May 16, for taking out and replacing 30 strainers in city's artesian wells at Alta Loma, Tex. C. G. Wells is City Engr. (Advertised, Engineering News.)

PONCA, OKLA.—A water-works system will be constructed.

PUEBLO, COLO.—Enlargements to the Dotson reservoir in Township 22, to cost $6,000, and construction of the Huerfano supply ditch, 18 miles long, to cost $18,000, are planned by E. V. Garnett, D. H. Cross and B. Cross. The headquarters of the ditch will be on the east bank of Huerfano River in Township 22 and the ditch will irrigate 2,500 acres of land in that township. The canal will be five feet deep, 24 ft. wide on top and 14 ft. wide on bottom. The average grade will be one foot per 1,000 ft., the carrying capacity to be 330 cu. ft. of water per second. The reservoir, as originally planned, was to have capacity of 1,305 acre feet, but the enlargement will give it a total capacity of 2,493 acre feet. The source of supply will be from the Huerfano River and the Chicosa Arrova.

TACOMA, WASH.—F. A. KEASAL has secured contract for laying water mains in A and various other streets, at $24,978. Frank L. Davis is City Engr.

BRANDON, MAN.—Bids are asked by G. R. Coldwell, Chn. Water-Works Com., until 4 p. m., May 6, for supplying about 85 tons 6 and 8-in. c.-i. pipe and specials. W. H. Shillinglaw is City Engr.

INDIAN HEAD, SASK.—The water-works system will be extended.

ARCOLA, SASK.—Bids will soon be asked for constructing water-works system. Cost, $60,000.

CARDSTON, ALTA.—CAZAR BROS., of this city, have secured contract to remove 20,000,000 cu. yds. of earth in connection with the United States reclamation canal south of the International Boundry at $1,000,000.

SEWERAGE.

The names of parties awarded contracts are printed in capital letters.

BINGHAMTON, N. Y.—Bids are asked by D. C. Herrick, City Clerk, until 8 p. m., May 6, for constructing the Fourth Ward trunk sewer in the city of Binghamton. Henry J. Ogden, Ithaca, N. Y., is Consult. Engr. (Advertised, Engineering News.)

NATCHEZ, MISS.—See under Streets and Roads.

LINDEN, N. J.—The question of constructing sewerage system is reported under consideration. Estimated cost, $46,000.

TRENTON, N. J.—Bids are asked by the Common Council until May 7 for constructing sewers in Tyler St., Stuyvesant and Hermitage Aves. Harry B. Salter is City Clk. Abram Swan, Jr., is City Engr.

ST. MARYS, PA.—Alexander Potter and T. Chalkley Hatton have been retained by the Borough as Consulting Engineers in connection with design and construction of sewerage system and sewage disposal plant for the Borough. The work will be constructed this year. Estimated cost, $50,000.

WASHINGTON, D. C.—Bids are asked by the District Commissioners until noon, May 13, for constructing sewer. (Advertised, Engineering News.)

WASHINGTON, D. C.—Bids were opened April 12 by the District Commissioners for construction of four sewers in the District. Bidders were: (a) James A. Coyle, Washington; (b) R. J. Beall Construction Co.; (c) E. J. Cartwright, Fredericksburg, Va.; (d) Lyons Bros., Washington; (e) E. G. Gummel, Eckington, D. C.

Sewer A. Ordinary excavation: (a) $1.50; (b) $1.05; (c) $1.60; (d) $1.70; (e) $1.40. Sewer brick masonry: (a) $20; (b) $16; (c) $18; (d) $19; (e) $22. Vitrified brick masonry: (a) $30; (b) $21.75; (c) $22; (d) $24; (e) $27. Concrete masonry "D": (a) $10; (b) $8.40; (c) $10.50; (d) $10; (e) $10.

Sewer B. Ordinary Excavation: (a) $1.50; (b) 78 cts.; (c) $1.20; (d) 95 cts.; (e) $1.15. Sewer brick masonry: (a) $16; (b) $15.75; (c) $18; (d) $16; (e) $19. 24-in. pipe: (a) $1.20; (b) $1.34; (c) $1.25; (d) $1.30; (e) $1.25. 18-in. pipe: (a) $1.10; (b) $1.19; (c) $1; (d) $1.15; (e) $1. 15-in. pipe: (a) 95 cts.; (b) $1.08; (c) 90 cts.; (d) $1.10; (e) 95 cts. 12-in. pipe: (a) 79 cts.; (b) 89 cts.; (c) 75 cts.; (d) 90 cts.; (e) 90 cts.

Sewer C. Ordinary excavation: (a) $1.50; (b) $1.50; (c) $1.70; (d) $2.50; (e) $1.50. Sewer brick masonry: (a) $20; (b) $18.50; (c) $20; (d) $20; (e) $22. Frederick brick masonry: (a) $24; (b) $24; (c) $22; (d) $20; (e) $25. Concrete masonry "D": (a) $12; (b) $10.50; (c) $11; (d) $12; (e) $12.

Sewer D. Ordinary excavation: (a) $1.50; (b) 95 cts.; (c) $1.40; (e) $1.25. Sewer brick masonry: (a) $20; (b) $15.75; (c) $18; (e) $20. 21-in. pipe: (a) $1.80; (b) $1.30; (c) $1.30; (e) $1.20.

BALTIMORE, MD.—Bids are asked by the Board of Awards until 11 a. m., May 15, for constructing storm-water drains, Contracts Nos. 2 and 3. For approximate quantities of work see advertisement. Benj. T. Fendall is City Engr. (Advertised, Engineering News.)

SUMTER, S. C.—Bids will soon be asked for constructing sewerage system. C. M. Hurst is City Clk.

SANDERSVILLE, GA.—Bids are asked until 3 p. m., May 3, for furnishing material and constructing about six miles of 8 to 15-in. sewers, including manholes, flushtanks, etc. D. L. Cheatham is Mayor. Arthur Pew, 619-20 Temple Court, Atlanta, Ga., is Constr. Engr. (Advertised, Engineering News.)

GUNTERSVILLE, ALA. — The LONG-LEWIS HARDWARE CO., of Bessemer, Ala., has been awarded contract for laying sanitary sewer and water-works pipe line.

CROWLEY, LA.—Contracts for installation of sewerage system and extension of water-works have been awarded to the following contractors: Furnishing sewer pipe, CHATTANOOGA SEWER PIPE & FIRE BRICK CO., Chattanooga, Tenn., $18,135; laying sewer pipe, TRUEHEART & JACKSON, San Antonio, Texas, $24,099; cast-iron pipe and specials, UNITED STATES CAST-IRON PIPE & FOUNDRY CO., 71 Broadway, New York, $13,666. Contract will be awarded later for pumping machinery, the bid of Trueheart & Jackson at $4,000 having been rejected, the estimated cost of equipment being $2,500. Armas Durio is Supt. Water-Works.

SHELBYVILLE, KY.—The date of receiving bids for constructing system of sewers and septic tanks has been extended until 8 p. m., April 23, at which time bids will be received by Camden W. Ballard, Secy. Bd. of Sewer Commissioners. The sewer system consists of approximately five miles of 6 to 15-in. sewers, 62 manholes, 14 lampholes and 6 flushtanks. The septic tank to be 8 × 34 × 92 ft., constructed of concrete with reinforced concrete roof covered with 18 ins. of earth. Charles E. Collins, Drexel Bldg., Philadelphia, Pa., is Consult. Engr. (Advertised, Engineering News.)

BARBERTON, OHIO.—Storm sewer will be laid in Wunderlich Ave., at cost of $12,000. Harry Alcorn is City Engr.

CHILLICOTHE, OHIO.—Sewers will be laid in Rose St. from alley between Main and Second Sts. to Scioto River. H. M. Redd is City Engr.

EATON, OHIO.—Plans and specifications for constructing sewerage system, including sanitary and surface drainage and disposal plant, have been prepared by R. L. Reid, C. E. Estimated cost, $125,000.

LANCASTER, OHIO.—Sewers will be laid in Park St. at cost of $12,000. John N. Wolfe is City Engr.

MANSFIELD, OHIO.—Sewers will be laid in North Diamond St. from East Third to East Fourth Sts. and in Blanche St. from South Main to Lexington Sts. Loren Keith is City Engr.

SANDUSKY, OHIO.—The City Council has passed resolution to construct reinforced concrete sewer in Arthur, Fifth and Scott Sts., ranging from 5 × 3 ft. to 3 × 3 ft. in diameter. Estimated cost, $26,000. A. C. Schultz is City Engr.

RAVENNA, OHIO.—We are officially advised that the following bids were received April 9 for completing sewers: McGary & McGowan, Akron, Ohio, $44,616. Essex Construction Co., 504 Prudential Bldg., Buffalo, N. Y., $46,670. Wilson & Devine, Alliance, Ohio, $50,491. S. W. Parshall & Co., Akron, Ohio, $50,775. McShaffrey & Morgan, Akron, Ohio, $53,156. L. Garrett, Kent, Ohio, $54,903. Phillips & Bixel, Cleveland, Ohio, $56,549. T. W. Nicholson, Cleveland, Ohio, $56,727. Reserve Construction Co., Cleveland, Ohio, $66,429. Itemized bids are given this week under Contract Prices. Williams, Proctor & Potts, Inc., 17 Battery Pl., New York, are Engrs.

ESCANABA, MICH.—JOHN McLAUGHLIN has secured contracts for constructing three sanitary sewers.

RICHMOND, IND.—Bids are asked by the Board of Public Works until 10 a. m., May 8, for constructing sewerage system and disposal plant. Estimated cost, $48,000. Fred R. Charles is City Engr. (Advertised, Engineering News.)

INDIANAPOLIS, IND.—The Board of Public Works has awarded contract for construction of Pleasant Run Sewer with reinforced concrete blocks at $5.73 per ft. to M. M. DEFREES, for $120,000. Blaine H. Miller is City Engr.

KOKOMO, IND.—Plans and specifications are being prepared by W. F. Mann, City Engr., for constructing Smith Branch sewer. Bids will soon be asked.

QUINCY, ILL.—No contract was let April 10 for constructing section of 3½-ft., 2-ring brick storm sewer, about 1,000 ft. in length. Estimated cost, $4,000. Plans will be changed and new bids received by the Board of Public Works. S. L. Hancock, City Engr.

ROCKFORD, ILL.—Bids are asked by the Board of Local Improvements until April 22 for construction of sewers in portions of Andrews, North Second, East State, Blaisdell and Parmele Sts. and Camp Ave., consisting of 5,100 ft. 9-in. pipe. Cost, $5,300. Edwin Main is City Engr.

EAST ST. LOUIS, ILL.—Bids are asked by the Board of Local Improvements, E. J. Eggmann, Clk., until noon, April 25, for constructing sewer in Third St., from Lynch to Baugh Aves. The work consists of laying 1,076 lin. ft. 20-in. sewer pipe, 955 lin. ft. 18-in. sewer pipe, 7 cast-iron manhole covers, 16 cu. yds. brick masonry in manholes. W. J. Crocken is City Engr.

OSHKOSH, WIS.—Bids are asked until April 22 by the Board of Public Works, W. A. Marden, Chn., for constructing sewers in portions of Grant St. and Western Ave. George H. Randall is City Engr.

Bids are asked until April 27 by the Board of Public Works, W. A. Marden, Chn., for constructing sewers in portions of Grand Ave., Ohio, Osceola and Spruce Sts.

DES MOINES, IOWA.—The Board of Public Works, W. W. Wise, Chn., April 5 awarded contract for constructing Grand View Sewer System No. 1, requiring about 10,449 lin. ft. 10, 12, 15, 18 and 20-in. vitrified pipe sewers, to J. W. CAMPBELL, at $1.74 per ft. Other bids were submitted by Geo. M. King, $2.60; Christie Construction Co., $1.90; Day & Smith, $1.98, and J. C. Likes, $1.97. George D. Dobson is City Engr.

LARNED, KAN.—The contract for constructing sewerage system has been let to the MUNICIPAL CONSTRUCTION CO., of Kansas City, Mo., at about $6,000. W. Peter is City Clk.

WINFIELD, KAN.—Bids will soon be asked for constructing sanitary sewerage system and septic basins. Estimated cost, $40,000. D. F. Merry is Engr.

FT. RILEY, KAN.—Bids are asked until May 1, by Capt. W. M. Whitman, Constr. Q. M., for constructing retaining wall, catch basins and culverts.

ABERDEEN, S. DAK.—KELLEY & RINGROSE, of this city, have secured contract for furnishing labor for constructing storm sewer from Railroad Ave. to Moccasin Creek, at about $10,000. The city will furnish material. Estimated cost, $6,000. D. C. Washburn is City Engr.

PARIS, TEX.—Bids will probably be received about May 1 for construction of east side sewer and septic tank. Estimated cost, $17,500. I. C. Bishop is Mayor.

BARTLESVILLE, IND. T.—The citizens have voted bonds amounting to $40,000 for extension of sewers. W. H. Whaley is City Engineer.

SPRINGFIELD, ORE.—McCLAIN & McARTHUR have secured contract for constructing sewer system, at $3,528.

CORONA, CAL.—The business men are reported to be considering question of constructing sewerage system.

BOISE, IDAHO.—Bids are asked by R. B. Turner, Q. M., until 11 a. m., May 8, for constructing sewer system at Boise Barracks.

BRIDGEBURG, ONT.—George Ross, of Welland, Ont., has completed plans for constructing eight miles of pipe sewers and septic tanks. Estimated cost, $125,000.

GARBAGE DISPOSAL.

The names of parties awarded contracts are printed in capital letters.

LAWRENCE, MASS.—The Board of Health contemplates purchasing an incinerator for destroying ashes and garbage.

NEW YORK, N. Y.—Bids are asked by George Cromwell, Pres. Boro. of Richmond, until noon, May 7, for furnishing material and constructing reinforced concrete refuse destructor at West New Brighton, Boro. of Richmond. (Advertised, Engineering News.)

CINCINNATI, OHIO.—The Board of Public Service has adopted plans for erecting two dumping stations and equipment to cost $149,000. One to be located in district bounded by Third, Pearl, Lawrence and Sycamore Sts., and other in district bounded by John, Race, Liberty and Findlay Sts. Charles N. Dannenhower is Ch. Engr.

CHICAGO, ILL.—Bids are asked by Wm. L. O'Connell, Commissioner of Public Works, until 11 a. m., April 23, for furnishing and delivering approximately 600 standard 4-yd. garbage boxes.

MILWAUKEE, WIS.—The citizens April 2 voted to issue bonds amounting to $100,000 for constructing a garbage plant. Charles G. Poetsch is City Engr.

STREETS AND ROADS.

The names of parties awarded contracts are printed in capital letters.

ACTON, MASS.—CHARLES E. HORNE has been awarded contracts for constructing one mile of macadam road and concrete bridge in this city and redressing mile of state road from Millbury line into Sutton.

FT. ADAMS (Newport Post-Office), R. I.—Plans and specifications for constructing concrete walk and macadam road with stone gutter are on file at office of Engineering News, New York. Bids are asked until May 1.

ALBANY, N. Y.—The following bids were received April 15 by the Board of Contract and Supply, for grading and paving Western Ave., from present terminus of pavement to city line: Vulcan Engineering Co., $41,646; Robert Shafer, $39,950; Mulderry Bros., $41,889. Supplementary proposal: Vulcan Engineering Co., $40,524; Robert Shafer, $48,390; Mulderry Bros., $40,789; M. F. Dollard, $37,200. The bidders are all of Albany. Walter Melius is City Engr. Itemized bids will be given next week under Contract Prices.

NEW YORK, N. Y.—Bids are asked by the Department of Water Supply, Gas and Electricity, John H. O'Brien, Comr., until 2 p. m., April 24, for furnishing materials, repairing and restoring artificial stone sidewalks and curbing and resetting natural stone curbing.

Bids are asked by the Department of Parks, Moses Herrman, Pres., until 3 p. m., April 25, for furnishing and delivering 800 cu. yds. broken stone of trap rock and 1,000 cu. yds. trap rock screenings, for parks, Boro. of The Bronx.

Bids are asked by Bird S. Coler, Pres. Boro. of Brooklyn, until 11 a. m., April 24, for regulating and repaving with asphalt block pavement on concrete foundation portions of various streets, Boro. of Brooklyn.

The ASPHALT CONSTRUCTION CO., Madison Ave. and 137th St., has secured contract for paving 163d St., from Third Ave. to Stebbins Ave., Boro. of The Bronx, at the following bid: 5,900 sq. yds. iron slag pavement, $2.70; 10,250 sq. yds. asphalt block, $1.82; 2,380 cu. yds. concrete, $4.58; 4,900 lin. ft. old curb, 30 cts.; total, $46,955. The totals of the other bids were: Continental Asphalt Paving Co., $52,149; Uvalde Asphalt Paving Co., $52,537, and Sicilian Asphalt Paving Co., $48,761.

The lowest bid opened April 4 by Louis F. Haffen, Pres. Boro of The Bronx, for paving Crotona Park North, from East 175th St., at Arthur Ave., to East 175th St., at Waterloo Pl., was submitted by the Continental Asphalt Paving Co., 42 Broadway, New York, at the following bid: 9,580 sq. yds. asphalt blocks, $1.80; 1,550 cu. yds. concrete, $4.48; 5,700 lin. ft. old curb, 39 cts.; total, $26,411. The totals of the other bids received were: Barber Asphalt Paving Co., $28,674; Asphalt Construction Co., $29,439, and Hastings Pavement Co., $26,966.

The following are the totals of bids opened April 4, by Louis F. Haffen, Pres. Boro. of The Bronx, for paving with asphalt block on concrete foundation: (a) Hoe Ave., 3,740 sq. yds. asphalt block, 610 cu. yds. concrete, 2,300 lin. ft. old curb; (b) Crotona Park South, 4,400 sq. yds. asphalt block, 705 cu. yds. concrete, 2,350 lin. ft. old curb; (c) East 166th St., from Boston Road to Prospect Ave., 3,950 sq. yds. asphalt block, 670 cu. yds. concrete and 3,000 lin. ft. old curb; Barber Asphalt Paving Co., (a) $11,002, (b) $12,706, (c) $14,059. Hastings Pavement Co., (a) $10,577, (b) $12,434, (c) $12,466. Asphalt Construction Co., (a) $11,672, (b) $13,481, (c) $12,765. Continental Asphalt Paving Co., (a) $10,324, (b) $12,218, (c) $12,297.

The Clinton Point Stone Co., 170 Broadway, New York, submitted the lowest bid April 4 to Louis Haffen, Pres. Boro. of the Bronx, for 45,000 cu. yds. 1½-in. trap rock stone, and 15,000 cu. yds. ½-in. trap rock stone screenings at $2.15 per cu. yd.; total, $129,000. The totals of the other bids received were: Manhattan Trap Rock Co., $133,800, and J. B. Conklin, $135,000.

The NEWMAN CONSTRUCTION CO., 1127 Willoughby Ave., Brooklyn, has secured contract for regulating and repaving with granite on concrete foundation Broadway, from Monroe to Fulton St., Boro. of Brooklyn, at the following bid: 19,240 sq. yds. granite block pavement, with tar and gravel joints, $2.60; 2,100 sq. yds. old stone pavement, relaid, $1; 4,170 cu. yds. concrete, $4; 8,140 lin. ft. new curb, 70 cts.; 2,980 lin. ft. old curb, reset, 70 cts.; 3,400 sq. ft. new granite bridgestones, 70 cts., and 230 sq. ft. old bridgestones, relaid, 30 cts.; total, $79,597. The totals of the other bids were: George & Farrell, 576 Douglass St., Brooklyn, $84,816; John E. Quinn, 227 Linden Ave., Brooklyn, $85,447, and O'Grady Bros., 72 North Eighth St., Brooklyn, $84,631.

The CITY EXCAVATING & CONTRACTING CO., 407 Hamilton Ave., Brooklyn, has secured contract for regulating and repaving with Medina sandstone on concrete foundation King St., from Dwight St. to Conover St., Boro. of Brooklyn, at the following bid: 4,760 sq. yds. Medina sandstone block with cement joints, $2.70; 30 sq. yds. old stone pavement, relaid, 30 cts.; 940 cu. yds. concrete, $5.50; 2,180 lin. ft. new curb, 85 cts.; 700 lin. ft. old curb, reset, 35 cts.; 440 sq. ft. new Medina sandstone bridgestones, 60 cts.; total, $20,393. Totals of the other bids were: F. J. Gallagher, 574 Park Pl., Brooklyn, $22,919, and John E. Quinn, 227 Linden Ave., Brooklyn, $21,443.

LONG ISLAND CITY (L. I.), N. Y.—The following are the bids opened April 1 by Jos. Bermel, Pres. Boro. of Queens, for regulating and grading the Boulevard from Webster Ave. to Broadway, First Ward: (a) Long Island Contracting & Supply Co., $135,967; (b) Henry J. Mullen, $159,623; (c) Thos. T. Tuohy Co., $174,013; (d) Peace Bros., $163,324: 555 cu. yds. rock excavation, (a) $8.00, (b) $9.23, (c) $7.50, (d) $5.00; 4,866 cu. yds. earth excavation, (a) 15 cts., (b) 83 cts.; (c) 1 ct.; (d) 1 ct.; 105,000 cu. yds. earth fill, (a) $1.22, (b) $1.40, (c) $1.60, (d) $1.50; 300 lin. ft. 24-in. iron drain pipe, (a) $9.00, (b) $11.50, (c) $6.00, (d) $10.00.

Bids were opened April 1 by Jos. Bermel, Pres. Boro. of Queens, for regulating, grading, curbing and laying sidewalks and crosswalks as follows: Hoyt Ave., from Boulevard to Lawrence St., and from Debevoise Ave. to Flushing Ave., First Ward: Lowest bidder, Astoria Contracting Co., as follows: 25,000 cu. yds. earth excavation, $1.20; 6,800 lin. ft. concrete curb, $1.48; 31,500 sq. ft. new flagstones, 36 cts.; 7,500 sq. ft. new bluestone bridging, 98 cts.; total, $58,754. Totals of other bidders: Thos. T. Tuohy & Co., $61,225, and Peace Bros., $66,455. Harris Ave., from Jackson Ave. to Hunter Ave., and from the Crescent to Vernon Ave., First Ward. Lowest bidder: John T. Clancy, as follows: 100 lin. ft. old curb, reset, 25 cts.; 700 cu. yds. rock excavation, $7.60; 1,900 cu. yds. earth excavation, 82 cts.; 20,500 cu. yds. earth fill, furnished, 99 cts.; 5,782 lin. ft. concrete curb, $1.46; 25,500 sq. ft. new flag, 36 cts.; 5,516 sq. ft. new bluestone bridging, $1; total, $45,926. Totals of other bids: Peace Bros., $51,027; Thos. T. Tuohy & Co., $47,194, and Newman Construction Co., $46,601. Lawrence St., from Flushing Ave. to Wolcott Ave., First Ward: Lowest bidder, Thos. T. Tuohy Co., 22,000 cu. yds. earth excavation, $1.25; 1,600 cu. yds. earth fill, $1; 7,900 lin. ft. concrete curb, $1.50; 38,500 sq. ft. new flag, 35 cts.; 2,200 sq. ft. new bluestone bridging, $1; total, $56,625. Totals of other bids: John T. Clancy, $62,505; Astoria Construction Co., $60,542, and Peace Bros., $63,175.

TROY, N. Y.—Bids are asked by the Board of Contract and Supply, James M. Riley, Clk., until 11 a. m., April 19, for furnishing materials and labor required in paving with granite blocks, gravel and sand foundation, Broadway, from Seventh Ave. to Institute Alley. The approximate quantities are as follows: 490 sq. yds. granite pavement, 240 sq. ft. bridge stone and resetting 160 lin. ft. curb. Edward B. Carey is City Engineer.

BAY SIDE (L. I.), N. Y.—Bids will soon be asked by the McKnight Realty Co. for grading, paving, laying sidewalks, etc., at Bay Side. Estimated cost, $125,000. I. T. McKnight is Local Mgr.

NIAGARA FALLS, N. Y.—Bids will soon be asked by the Board of Public Works for laying five pavements. Estimated cost, $56,722. Walter McCulloh is City Engr.

BUFFALO, N. Y.—Bids are asked by the Department of Public Works, F. G. Ward, Comr., until 11 a. m., April 24, for repaving portions of Washington, Alabama, Tousey and Champlin Sts.

EASTON, PA.—The State Highway Department has awarded contracts for the two remaining sections of the improved highway to be constructed between Easton and Bath, via Nazareth. HERRICK & FRAZER, of Pocono Lake, Monroe County, will build the Lower Nazareth section for $28,000, and the Palmer Township section for $30,000. The Upper Nazareth division has been awarded to McCORMICK & CO., of Philadelphia, for $28,600. The road will be 16 ft. in width. Its length will be as follows: In Upper Nazareth Township, 17,153 ft.; Lower Nazareth Township, 16,021 ft.; in Palmer Township, 17,890 ft.

PITTSBURG, PA.—Bids are asked by the County Commissioners until noon, April 30, for improving the following roads: Little Deer Creek Valley, Milltown and Unity, Unity and Trestle, McKees Rocks and Forest Grove, McKees Rocks and Steubenville Pike and Beaver Grade. F. P. Booth is County Controller.

ELIZABETH, PA.—The contract for macadamizing the county road from Elizabeth Borough, via Lock No. 3 and up Pangburn's hollow, has been let by the Commissioners to the COLLINS-GORDON CO., at $32,964.

PETERSBURG, VA.—Bids are asked by the Sewer, Sidewalk and Water Mains Commissioner until 4 p. m., May 2, for constructing about 26,000 sq. yds. pavement on various streets. Bids will be received for each of the following kinds of pavement: Granite block on sand base, asphalt on sand base and vitrified block on concrete base. R. D. Budd is City Engr. (Advertised Engineering News.)

BLUEFIELD, W. VA.—Bids are asked by the Board of Supervisors, J. T. Akers, Audr., until 2 p. m., May 16, for macadamizing and paving with brick on concrete foundation portions of various streets. George H. Hill is City Engr. (Advertised, Engineering News.)

MACON, GA.—The W. J. OLIVER CO., Knoxville, Tenn., has contract for grading to be undertaken by the Central of Georgia Railway in connection with shops and other improvements at Macon, for which about $1,000,000 will be expended. J. F. Hanson, Macon, is Pres., and C. K. Lawrence, Savannah, Ga., is Ch. Engr.

NATCHEZ, MISS.—Bids are asked by the Mayor and Board of Aldermen until 5 p. m., May 15, for paving approximately 22,500 sq. yds. with sheet asphalt, bituminous macadam or vitrified brick; 12,500 ft. cement curb and furnishing and laying 6,000 lin. ft. 10 to 24-in. storm sewers, including connections and appurtenances. George Eisele is City Clk. J. N. Hazlehurst is Consult. Engr. (Advertised, Engineering News.)

NEW ORLEANS, LA.—Bids are asked by Charles R. Kennedy, Comptroller, until 1 p. m., April 22, for repaving Magazine St. with square granite block, from Canal to Julia Sts. W. J. Hardee is City Engr.

LOUISVILLE, KY.—Bids are asked by the Board of Public Works until April 26 for grading, curbing and paving nine streets with asphalt pavement and vitrified block gutters. Work embraces 11,300 cu. yds. of excavation, 13,800 sq. yds. of asphalt, 2,400 sq. yds. of block gutters. Estimated cost, $44,500. Joseph P. Claybrook is City Engr.

Bids were received by the Board of Public Works March 22 for paving 27 blocks of sidewalks with brick laid in sand. HENRY L. KREMER was awarded contracts for 22 blocks at $0.58 per sq. yd. and 3 blocks at $0.57 per sq. yd. L. R. FIGG was awarded contracts for 2 blocks at $0.60 per sq. yd.

LOUISVILLE, KY.—Bids are asked by the Board of Public Works until May 18 for paving various streets with asphalt. Estimated cost, $40,000. Joseph P. Claybrook is City Engr.

CAMBRIDGE, OHIO.—PORT E. GIBSON, of this city, has been given contract for grading and laying 10,000 ft. of cement sidewalk, five feet wide, to cover and cross the south end of the Clark farm.

ASHLAND, OHIO.—Bids are asked until noon, May 6, for furnishing material and grading, paving and curbing portion of Union St. F. L. Niederheiser is City Engr.

BUCYRUS, OHIO.—The County Commissioners have let contract to G. V. HARER, at $4,999, for constructing one mile of pike on the road between Holmes and Lykens Townships.

CINCINNATI, OHIO.—Bids are asked by the Board of Public Service, M. J. Keefe, Clk., until noon, April 26, for grading, paving 6,730 sq. yds. with brick and setting 3,488 lin. ft. sandstone curb on portion of Western Ave. Estimated cost, $19,970. C. N. Dannenhower is Ch. Engr.

Bids are asked by the Board of Public Service until noon, May 1, for 9,000 cu. yds. grading, 1,370 lin. ft. granite curb, 1,594 sq. yds. granite paving on portion of Butler St. Estimated cost, $11,526.

Bids are asked by the Board of Public Service until noon, May 3, for grading, setting 3,920 lin. ft. granite curb and paving with granite 10,300 sq. yds. on portion of Harrison Ave.

John W. Sullivan, 703 Mercantile Library Bldg., was low bidder for grading, setting sandstone curb and macadamizing roadway of South Hudson Ave., at $5,773.

The contract for setting granite curb, grading and paving with granite portion of Broadway has been awarded to JOHN M. O'CONNOR, 1906 Highland Ave., at $7,306.

Logan & Klotter, 42 Perrin Bldg., were lowest bidders for paving the following streets with brick: Warsaw Ave., 1,320 sq. yds., $3,751; Hawthorne Ave., 4,000 sq. yds., $8,220; Maison Pl., 1,925 sq. yds., $4,058; Trade St., 1,910 sq. yds., $6,688, and Price Ave., 9,080 sq. yds., $19,197.

LOUIS DRACH CONSTRUCTION CO., 18 Temple Bar Bldg., secured contract for setting cement curb and gutter, grading and macadamizing roadway of Beech Ave., at $7,390.

JAMES AGNES, Box 16, Builders' and Traders' Exchange, has been awarded contract for paving Highland Ave. with granite, at $21,823.

PAINESVILLE, OHIO.—Bids are asked by Sam Huston, State Highway Comr., until May 3, for constructing highway.

LAGRANGE, IND.—Contract for paving Detroit St. has been let to the MOELLERING CONSTRUCTION CO., of Ft. Wayne, Ind., at $13,281.

VINCENNES, IND.—Bids are asked by the County Commissioners until 2 p. m., May 7, for construction of 9,332 ft. of gravel road in Widner Township. John T. Scott is County Audr.

BRAZIL, IND.—Bids are asked by the County Commissioners until 11.30 a. m., May 7, for construction of about 23 miles of gravel roads in Harrison Township. Jas. L. Burns is County Audr.

SYCAMORE, ILL.—Bids are asked until April 19 for 10,000 sq. yds. asphalt pavement. W. M. Hay is Engr. for Board of Local Impvts.

EAST ST. LOUIS, ILL.—Bids are asked by the Board of Local Improvements, E. J. Eggmann, Clk., until noon, April 25, for improving portion of Ninth St. The work consists of 8,770 lin. ft. limestone curbing, set; 20,700 sq. yds. vitrified brick paving or concrete, 3,800 cu. yds. excavation placed in fill, 7,000 cu. yds. fill in excess of excavation, and 700 lin. ft. 12-in. sewer pipe for cross-drains laid.

Bids also are asked at the same time for improving Veronica Ave. The work consists of 1,500 lin. ft. combination curb and gutter, 2,186 sq. yds. vitrified paving brick, laid on concrete; 860 cu. yds. filling (earth or sand) in excess of excavation, 150 cu. yds. excavation placed in fill, 36 lin. ft. 10-in. sewer pipe laid, two stone inlets with iron covers, one cast-iron manhole cap and 9 cu. yds. brick masonry in manholes and catch-basins. W. J. Crocken is City Engr.

BLUE GRASS, IOWA.—Bids are asked by the Town Council until May 1 for laying 3,000 sq. ft. of permanent sidewalk. J. W. Stramp is Street Comr.

OLYMPIA, WASH.—The Council has awarded contract to HERMAN MALLONY at $3,745 for grading Quince St.

OGDEN, UTAH.—Bids are asked until 2 p. m., April 20, for laying all concrete sidewalks, curbs, gutters and intersections that may be ordered by the city during the present year. A. F. Parker is City Engr.

STRATFORD, ONT.—Bids are asked by H. Pauli, Chn. of Board of Works, until noon, April 24, for constructing about 70,000 sq. ft. concrete walk. W. R. W. Parsons is City Engr.

OAKVILLE, ONT.—Bids are asked by Edgar Bray, Town Clk., until 3 p. m., April 22, for laying concrete cement sidewalks.

MANUFACTURING PLANTS.

The names of parties awarded contracts are printed in capital letters.

BENNINGTON, VT.—The plans for a factory which the H. C. White Co., of North Bennington, is to erect immediately and use in addition to its present plant, provide for a 3-story and basement building of brick and reinforced concrete. The new building will be fireproof throughout and about $50,000 worth of automatic machinery, built and patented by the company for its exclusive use, will be installed. A special vault attached will, with the old vaults, contain and protect about $100,000 worth of negatives.

WORCESTER, MASS.—The Herald Machine Co., Barbers Crossing, has awarded contract to E. J. CROSS, 82 Foster St., for constructing an addition to its plant. The building will be 150 × 90 ft., and will cost about $15,000.

PAWTUCKET, R. I.—The plans for the erection of a large weave shed at the plant of D. Goff & Sons, braid manufacturers, on River St., are being prepared. The new building is to be on land lying between River and Elm Sts., just opposite the present structure. The building will be two stories in height and of brick, and it is intended to run about 400 looms. The weave shed and the mill will be connected by two tunnels, which are to run under River St.

PROVIDENCE, R. I.—The Crown Worsted Mills, Providence, will erect a machine and woodworking shop, the building to be of brick, 22 × 36 ft., and two stories high.

MARLBORO MILLS, CONN.—A. B. Miller, proprietor of the Westminster Silk Co., has decided to rebuild on the site of the plant recently burned, and work of clearing the property has been started.

GLENS FALLS, N. Y.—The Standard Textile Co., whose plant at Fort Edward was burned recently, has purchased a lot on the line of the Delaware & Hudson R. R., near the Weil-Haskell factory in Glens Falls, and will rebuild at once. The building will be of concrete, three stories high, 50 × 120 ft., and will cost $15,000. About $50,000 will be expended before the plant is ready to operate, which is expected to be July 15 or Aug. 1. The company manufactures cotton batting.

We are officially advised that the Moore Screw Co. has let contract to REILLY & ACKER, Glens Falls, for constructing a 1-story, fireproof, brick and steel machine shop at Glens Falls. W. W. Wells is Mgr.; E. E. Whitney, Sandy Hill, N. Y., is Arch. Cost, $40,000.

AUBURN, N. Y.—The contract for the construction of a jute mill for the Columbian Rope. Co. has been awarded to FRANK B. GILBRETH, 34 West 26th St., New York. The new mill will be 600 ft. long, 100 ft. wide and four stories high, mill construction, and will cost about $275,000. Work will be commenced on the new plant immediately and the building will be ready for occupancy about Aug. 15. A power plant, with a capacity of 1,500 HP., will be constructed. Charles T. Main, 45 Milk St., Boston, Mass., is Des. Engr.

PHILLIPSBURG, N. J.—The Warren Foundry & Machine Co. is having plans prepared for a foundry to be built here. It will be constructed of brick and steel, 1-story, 100 × 160 ft. Complete foundry equipment will be installed.

VINELAND, N. J.—Preparations are being made by John S. Cox & Co., Pittsburg, Pa., to build a glass bottle factory, to cost about $60,000. The plant will be located on Brewster Road, in the suburbs of Vineland.

PASSAIC, N. J.—The New Jersey Handkerchief Co., in which J. Canfield Howe, Acheson Harder Carter and others are interested, will build a 4-story addition to its 3-story plant, in Garden St. The structure will cost $15,000 and will have a front of 30 ft. and a depth of 40 ft.

NEWARK, N. J.—Contracts have been awarded, it is reported, by Alfred Peter, Arch., Market and Washington Sts., for the construction of a factory building for Kanfherr Bros., as follows: Mason work to THOMAS J. MACKINSON, 225 South Seventh St.; carpenter work to GUSTAVE A. GRUB CO.; stone work to HENRY SCHREITMULLER, 174 Waverly Pl., and the iron work to the CLEMENTS IRON WORKS. The building will be located at 140 East Kinney St., will be four stories high, 128 × 208 ft., of brick construction. A stack 150 ft. in height will also be erected. The plans call for mill construction, 180-HP. boilers, elevators, water tanks and fireproof stairway. Estimated cost, $60,000.

SOUTH BETHLEHEM, PA.—C. BEYSHER has secured contract to construct a knitting mill at South Bethlehem for the owners of the Austin Knitting Mill. A 2-story brick building will be erected, 100 × 50 ft.

SHARON, PA.—The Turner-Fricke Mfg. Co., Farmers' Bank Bldg., Pittsburg, Pa., will erect a new machine shop, 100 × 200 ft., at Sharon, Pa., for manufacturing the Turner-Fricke vertical three-cylinder gas engine. The shop will be equipped with the latest machinery for the manufacture of these engines. Cost, $100,000. Thomas Hannah, Diamond Bank Bldg., Pittsburg, is Arch.

READING, PA.—The Grey Iron Foundry & Machine Co., Reading, is to erect a new foundry, 30 × 150 ft., adjoining its present plant.

CHESTER, PA.—The Keystone Steel Castings Co. is having plans prepared for a plant to be constructed here. A building of brick and steel will be constructed and a power plant and special machinery will be added. A. G. Lorenz is Pres.

ST. CLAIR, PA.—It is reported that the Pennsylvania R. R. Co. will construct a machine shop, car shops and power house at St. Clair. Construction will be of brick and steel. Alexander C. Shand, Philadelphia, is Ch. Engr., Philadelphia.

BRIDGEVILLE, PA.—We are officially advised that the John B. Higbee Glass Co. will erect and equip a three 12-pot furnace pressed tableware factory on the ten-acre lot recently purchased by them. The main building to be 180 × 230 ft. Other buildings, including office, power, storage, etc., will be erected. Louis A. Holeman, Schofield Bldg., Cleveland, and Fulton Bldg., Pittsburg, is the Consult. Engr.

ODENTON, MD.—Washington, Baltimore & Annapolis Electric Ry. Co., main office, Maryland Trust Bldg., Baltimore, has awarded contract to the REINFORCED CONCRETE CONSTRUCTION CO., Cleveland, Ohio, for erection of proposed car repair shop. Roberts & Abbott Co., Maryland Trust Bldg., Baltimore, and Cleveland, Ohio, are Engrs.-in-Charge. J. G. Masterson is Secy.

BALTIMORE, MD.—Charles M. Anderson, Arch., 324 North Charles St., will prepare plans and specifications for a power house and extract manufacturing plant for J. S. Young & Co., Boston and Ellicott Sts. The building will be 219 × 50 ft., 3-story, and addition 36 × 50 ft. will be erected to their present plant. Adams & Schwab, 859 Calvert Bldg., Engrs., have charge of the installation of mechanical equipment.

BERWYN, MD.—The Carter Motor Car Co., Munsey Bldg., Washington, D. C., is having plans prepared for a 3-story factory to be built at Berwyn, of brick, steel and concrete. Power plant and special equipment are necessary. Estimated cost, $100,000.

WESTPORT (Baltimore post-office), MD.—The Carr-Lowrey Glass Co., Westport, has awarded contract to the BALTIMORE FERRO-CONCRETE CO., Glenn Bldg., 16 St. Paul St., Baltimore, for the construction of new factory building, two stories high, 90 × 400 ft., reinforced concrete construction throughout, with metal frames and sashes, slag roof. A portion of the building will be constructed on a pier 90 × 90 ft., and a bulkhead 250 ft. long will also be built. This latter work was awarded to ANDREW MILLER. New regenerative furnaces will be installed, the contract for these having been awarded to J. A. MATTHEWS & CO., Wellsburg, W. Va. Several smaller buildings, including a power house, will also be constructed.

RICHMOND, VA.—The Southern Stove Works will build additions to its plant on the Hermitage Road which will nearly double its present output of 300 stoves daily. It is proposed to erect fireproof warehouse 90 × 80 ft., constructed throughout of brick and steel, and a brick manufacturing building, four stories high, adjoining present foundry, which is 480 × 86 ft. Total expenditure will be about $30,000.

NEWBERN, N. C.—The New Bern Cotton Oil & Fertilizer Co. will rebuild its plant, lately burned. The new structure will be 70 × 140 ft. and will cost, with equipment, between $30,000 and $40,000. Charles L. Ives is Gen Mgr.; I. L. Crosby is Engr.-in-Charge.

SAVANNAH, GA.—The Central of Georgia Ry. Co. is proceeding with extensive improvements to its shops, consisting of erection of an additional brick building [illegible] × 228 ft. to car shops, installation of improved machinery and tools costing $75,000, two 200-KW. engines and generators to supply current for power and lights, electric elevator in main shops, etc. It is proposed to light the entire plant and to operate all the machinery by electricity, the smaller machines to be driven by pulleys connected with the general power dynamo and the larger machines to be directly connected with the individual motors. Entire improvements are reported to involve an expenditure of $150,000.. T. S. Moise is Gen. Mgr., Savannah. C. K. Lawrence is Ch. Engr.

TALLAPOOSA, GA.—C. E. Pearce, of Fayetteville, N. C., has organized a company with a capital of $200,000 to erect a yarn mill here. The plant will have 10,000 spindles.

JACKSONVILLE, FLA.—The following shop buildings will be erected by the Seaboard Air Line Ry. Co.: Round house, with small machine shop attached; machine and erecting shop, 117 × 380 ft., which will be separated from wheel, rod and tender shop by a transfer table and will have a 10-ton crane runway connecting it with tin and smith shop; wheel, rod and tender shop, 66 × 260 ft., with extension 60 × 66 ft.; tin and smith shop, 61 × 181 ft.; passenger-car shop, 90 × 300 ft.; car wheel, axle and smith shop, 28 × 150 ft.; boiler and engine room, 63 × 122 ft., and planing mill, 50 × 176 ft. E. L. Ryan is Div. Supt., Jacksonville. W. L. Seddon, Portsmouth, Va., is Ch. Engr.

BIRMINGHAM, ALA.—Tennessee Coal, Iron & R. R. Co. is reported to have awarded contract to UNITED ENGINEERING & FOUNDRY CO., Farmers' Bank Bldg., Pittsburg, Pa., for machinery and installation of new rail mill to have a daily capacity of 2,000 tons, and to PITTSBURG STEEL CO., Frick Bldg., Pittsburg, to build 50 × 140 ft. machine shop and 60 × 120 ft. blacksmith shop, to be equipped with three steam hammers, electric cranes, etc. General offices are at Birmingham; New York offices at 100 Broadway. John A. Topping is Pres.

JACKSONVILLE, ALA.—A contract has been awarded to T. C. THOMPSON & BROS., of Birmingham, for erecting an addition to the Ide Cotton Mill, at Jacksonville. The mill will run 25,000 spindles and will be operated by electricity. Cost, $750,000.

CINCINNATI, OHIO.—The Heekin Can Co. will erect a factory building 287 × 202 ft., of reinforced concrete construction, with concrete roof, metal window and door frames, power plant, six elevators, automatic sprinkling system, to cost $400,000. S. Hannaford & Sons, Hulbert Block, Cincinnati, are Archs.

The F. A. Klaine Co., stove manufacturers, will erect a molding shop, 82 × 101 ft., of brick and steel construction, with composition roof and a pattern shop, same construction, 32 × 93. Cost, $20,000. Edward Schloctermayer is Arch.

NILES, MICH.—The Eager Mfg. Co. has purchased land in this city and will erect thereon a factory to manufacture stovepipe connections and furnace pipes.

WYANDOTTE, MICH.—Mildner & Eisen, Archs., 1018 Hammond Bldg., Detroit, Mich., have prepared plans and are ready to take figures for a boiler and engine house and storage building for the Frank Marx Brewing Co., Wyandotte, to be three stories high, 68 × 33 ft., of fireproof construction, brick and reinforced concrete, composition roof, Bedford limestone trimmings, structural and galvanized iron, asphalt and cement floors, etc.

SAGINAW, MICH.—The Saginaw Cement Stone Co. will build a plant 275 × 800 ft. on Holland Ave. Hollow blocks, cement bricks, art work in cornices, pillars, steps, supports, etc., used in cement construction, will be made under the patents and with the machinery of the American Hydraulic Cement Co., of Denver, Colo.

DETROIT, MICH.—R. E. Raseman, Arch., 1302 Penobscot Bldg., is reported to have awarded contracts for a factory for Krentler & Shiell, 713 Bellevue Ave., as follows: Masonry, MAX W. BARTHOLOMAEI, 245 Warren Ave., East; carpentry, U. ARMSTRONG & CO., 1279 St. Antoine St.; structural iron, H. B. LAMB, 45-57 Joseph Campau Ave.; roofing and sheet metal, PAUL C. BERTLING, 344 Grand River Ave.; plumbing and heating, J. D. MONAT CO., 48 Porter St. Cost, $30,000.

MILWAUKEE, WIS.—Louis Lehle, 100 Randolph St., Chicago, Ill., let the mason contract to J. P. JONES, Milwaukee, Wis., and steel work to the HANSELL-ELCOCK CO., 251 23d St., Chicago, for a stock house to be built at Juneau Ave. and Broadway, Milwaukee, Wis., for the Val Blatz Brewing Co., of Milwaukee. It will be 7-story, of fireproof steel and concrete construction, have brick interior, composition roof and cost $250,000.

SUMMIT, ILL.—The THOMPSON-STARRETT CO., Fischer Bldg., 279 Dearborn St., has the general contract for a large plant for the manufacture of glucose and the by-products, to be built at Summit, south of 63d St., extending from Archer Ave. to the drainage canal, for the Corn Products Refining Co. G. E. Chamberlain, Ch. Engr., Heywood Bldg., Chicago. It will comprise numerous buildings, some of large dimensions, and fireproof steel construction, and is estimated to cost about $5,000. Reported in full last year.

The Corn Products Refining Co. has completed plans for a can-making plant near the new glucose works at Summit, mentioned above. It is estimated that the plant will cost between $150,000 and $200,000.

TURTLE LAKE, WIS.—Charles Berkstrum, of Fosterville, Wis., has engaged D. J. Murray, of Wausau, to draw plans for a new saw and planing mill to be erected for the Turtle Lake Lumber Co., of Turtle Lake, at a cost of $75,000.

STEVENS POINT, WIS.—W. L. PLAYMAN has the general contract, and the JOHN RICE FOUNDRY & MACHINE CO. has contract for the iron work for the new $40,000 addition to the Stevens Point Brewing Co.'s plant. Work will begin at once. Richard Griesser, Schiller Bldg., 109 Randolph St., is the Arch.

DES MOINES, IOWA.—Bids are asked until about May 15 by the R. O. Stutsman Co., of Peoria, Ill., for constructing a 2-story building, 50 × 100 ft., to be erected as an addition to its plant, which is to be removed from Peoria to Des Moines. A small power plant will be constructed.

ST. PAUL, MINN.—The American Hoist & Derrick Co., 63 South Robert St., St. Paul, will erect a foundry and machine shop, to cost $50,000, at Livingstone, near Filmore St.

NASHVILLE, ARK.—The Brown-Henderson Improvement & Timber Co. has purchased about 250,000,000 ft. of pine and hardwood timber and is building mills and factories as follows: Double-band sawmill, with capacity of about 100,000 ft. pine and 80,000 ft. hardwood per day; planing mill with five machines, band resaw and edger; factory for making boxes and working hardwood bolts, including matchers, planers, cleaving machines, etc., with capacity one carload per day and three cars hardwood. A. C. Ramsey is Mgr.

SPRINGDALE, ARK.—H. L. Stroud and Bryan Snyder, of Rogers, Ark., contemplate building a vinegar factory here to cost about $15,000. The plant will be 40 × 281 ft., and will have a capacity of 3,500 bushels of apples a day.

DALLAS, TEX.—Brown Cracker & Candy Co., Calhoun and Jefferson Sts., will erect additions to its plant which will about double the present capacity. Building will be four stories high, with basement, 100 × 200 ft., and when equipped will represent an investment of about $150,000.

MARSHFIELD, ORE.—C. A. Smith will establish at Marshfield a saw mill, which will have a capacity of 250,000 ft. in ten hours. Work of construction will begin at once, as preliminary work is being already started. The concern will be known as the C. A. Smith Lumber & Mfg. Co., the stockholders being the same as those of the C. A. Smith Lumber Co., 44th Ave., North and River Sts., Minneapolis, Minn. The plant will be composed of a collection of buildings. The chief one will be the saw mill. It will be located on Isthmus Slough, at a point about 400 ft. above the turn of the river. It will be constructed on cedar pilings. The structure will be 68 ft. wide and 368 ft. long. At one side an annex to the building will be the lathe department, where will be installed a lathe mill of the company's own pattern. It is probable that the cost of the plant will be something in the neighborhood of $150,000.

FORT WILLIAM, ONT.—At a cost of $1,000,000 the Canadian Pacific Ry. Co. will rebuild elevator "D," which was destroyed by fire recently. W. F. Fee is Res. Engr., Fort William.

The Grand Trunk Pacific Ry. Co. has decided to erect a large storage grain tank elevator here at once. Estimated cost, $1,250,000. F. W. Morse, Montreal, Que., is Gen. Mgr.

MISCELLANEOUS CONTRACTS.

U. S. RECLAMATION SERVICE.—All news relative to canal projects, etc., will be found under Water Supply—Irrigation.

ENGINEERS' SUPPLIES.—New York, N. Y.—Bids are asked until 2 p. m., April 24, by John H. O'Brien, Comr. of Water Supply, Gas and Electricity, for furnishing engineers' and draftsmen's supplies.

POST FENCE.—Prescott, Ariz.—Bids are asked by Capt. Chas. C. Walcott, Jr., A. Q.-M., U. S. A., until May 10, for the construction of a post fence at Whipple Barracks.

WIRE FENCE.—Fort Sam Houston, Tex.—Bids are asked until April 30 by L. J. Fleming, Constr. Q.-M., U. S. A., for the construction at Fort Sam Houston, Tex., of about 7,000 ft. woven wire fence, with gates, etc.

JETTY.—Nantucket, Mass.—Bids are asked at the U. S. Engineer office, Newport, R. I., until 11 a. m., May 8, for jetty construction at Nantucket. Lieut.-Col. J. H. Willard, Corps Engrs., U. S. A., is officer in charge. (Advertised, Engineering News.)

EXCAVATION.—Boston, Mass. — Specifications and bidding sheet are on file at office of Engineering News, New York, for rock excavation in Boston Harbor. Maj. Edward Burr, Corps Engrs., U. S. A. Bids are asked until May 8, as advertised in Engineering News.

CEMENT.—Washington, D. C.—The Secretary of the Interior has executed a contract and approved the bond of the UNIVERSAL PORTLAND CEMENT CO., of Chicago, Ill., for furnishing 55,000 bbls. of Portland cement for use in connection with the Shoshone, Wyo., and North Platte, Neb.-Wyo., irrigation projects. The cement will be furnished at $1.50 per bbl., f. o. b., cars at mills of the contracting company.

DREDGING.—Grand Rapids, Mich.—Contract for dredging Saugatuck Harbor, 60,000 cu. yds., has been awarded to GREILING BROS., Green Bay, Wis., at 15.8 cts. per cu. yd., scow measurement, and 15 cts. spoil bank measurement. List of bids received was given on April 4. Total cost, $9,480.

*CAPSTANS.—Norfolk, Va.—The Bureau of Yards and Docks, Navy Dept., Washington, D. C., has awarded to the HYDE WINDLASS CO., Bath, Me., contract for furnishing nine electric capstans for dry dock No. 3, at the Norfolk Navy Yard, at their bid of $16,400.

BREAKWATER.—Newport, R. I.—Bids are asked until 11 a. m., May 1, by Lieut.-Col. J. H. Ward, Corps Engr., U. S. A., for constructing a breakwater at Point Judith, R. I., as advertised in Engineering News. Specifications are on file at office of Engineering News, New York.

SUBWAYS.—Washington, D. C.—Bids are asked until noon, May 8, by Elliott Woods, Supt. U. S. Capitol Bldg. and Grounds, Washington, for constructing two subways to connect the Capitol Building with the Senate and House Office Buildings. (Advertised, Engineering News.)

STEEL.—Belle Fourche, S. Dak.—Bids are asked until 4 p m., April 30, by the U. S. Reclamation Service, Belle Fourche, for furnishing about 350,000 lbs. of steel, mainly for reinforcing concrete. James Rudolph Garfield is Secy. of the Interior. (Advertised, Engineering News.)

COAL AND ASH CONVEYOR.—Ellis Island (New York post-office), N. Y.—Bids are asked until 2.30 p. m., April 24, by Robert Watchorn, Comr. of Immigration, Ellis Island, for installing a coal and ash conveyor and erecting a dumping platform at the power plant here. (Advertised, Engineering News.)

PUBLIC BATH.—Albany, N. Y.—Bids are asked by the Board of Contract and Supply, Albany, until 3 p. m., May 6, for furnishing all materials and performing all the work necessary for erection and completion of Public Bath No. 3, at corner of Central Ave. and Ontario St. The estimated cost of the building is about $45,000. Isidore Wachsman is Clerk of the Board.

SUBWAY VENTILATION.—New York, N. Y.—Bids are asked until 2 p. m., April 25, by J. W. Stevenson, Comr. of Bridges, for installing the ventilating system and the electrical equipment for the Manhattan Subway station of the Williamsburgh (New East River) Bridge over the East River, between the Boros. of Manhattan and Brooklyn.

CINDER PITS, ETC.—Paducah, Ky.—The Illinois Central Railroad Co. will expend about $43,000 in improvements, to include two automatic driver pits, with new cinder pits, costing about $18,000; coal chute costing $45,000, trestlework at an estimated cost of $25,000, etc. W. C. Waggoner, Princeton, Ky., is Supt. Bridges and Buildings.

DREDGING.—League Island (Philadelphia post-office), PA.—The Bureau of Yards and Docks, Navy Dept., Washington, D. C., has awarded to the AMERICAN DREDGING CO., Mariner & Merchant Bldg., Philadelphia, contract for dredging the Delaware River front at the League Island Navy Yard at prices ranging from 30 to 40 cts. per cu. yd.

CEMENT.—Wheeling, W. Va.—Bids were received by Capt. F. C. Boggs, U. S. Engrs., on April 3, for furnishing and delivering about 9,500 bbls. of American Portland cement at Dam No. 18, Ohio River, as follows: (A) in sacks; (B) in bbls.: The Atlas Portland Cement Co., New York, N. Y., (A) $1.84; (B) $1.79; D. J. Kennedy Co., Pittsburg, Pa., (A) $1.89; (B) $1.86.

SUBWAY.—New York, N. Y.—Two bids were received on April 11 by the Rapid Transit Commission for building the Centre St. section of the proposed bridge subway loop. The Degnon Contracting Co., 218 East 42d St., submitted a bid of $2,952,000 for the subway construction, and $83,000 for the pipe galleries. Crawford & Co., 52 Ninth St., Brooklyn, $3,775,000 for the subway, and $50,000 for pipe galleries.

DREDGING.—New London, Conn.—Bids were received as follows on April 10 by Maj. Harry Taylor, Corps Engrs., U. S. A., for dredging in Connecticut River: (A) river dredging, about 90,000 cu. yds., price per cu. yd.; (B) jetty dredging, about 60,000 cu. yds., price per cu. yd.: Morris & Cumings Dredging Co., (B)* 23.9 cts.; Maritime Dredging Co., (A) 24.5 cts.; (B) 29.5 cts.; Hartford & New York Transportation Co., (A)* 11 cts.; (B) 24 cts. (*Recommended for acceptance.)

TUNNEL.—Buxton, Ore.—E. E. Lytle, Pres. of the Pacific Railway & Navigation Co., has let the contract for the construction of a tunnel on this road to A. J. & GEORGE McCABE, Chamber of Commerce Bldg., Portland, contractors. This is the first long tunnel to be driven on the Lytle road. A number of others will be built as soon as the work progresses sufficiently. The contract calls for a tunnel 1,400 ft. long at a point five miles almost directly west of Buxton, the place to which the road has already been completed. Geo. L. Davis is Ch. Engr., Hillsboro, Ore.

SHIP CHANNEL.—Morgan City, La.—The Atchafalaya Bay Ship Channel Co. has awarded contract to the BOWERS SOUTHERN DREDGING CO., of Galveston, Tex., at $125,000, for dredging a 14-ft. channel 11½ miles long. Contract for this work will be let in connection with its plans for providing a ship channel connecting southwest Louisiana with the Mississippi River by means of locks at Plaquemine. The company has an authorized capital stock of $250,000. F. B. Williams, Pres., and E. A. Pharr, Vice-Pres. and Gen. Mgr., Morgan City. Warren B. Reed, Hibernia Bank Bldg., New Orleans, is the Consulting Engr. in Charge.

PROJECTILES.—Washington, D. C.—The Bureau of Ordnance, Navy Dept., Washington, D. C., has awarded contracts as follows for target shell, for which bids were opened March 20: U. S. RAPID FIRE GUN & POWDER CO., Derby, Conn., 10,00 3-in. 50-calibre target shell, at $1.695 each; AMERICAN-BRITISH MFG. CO., Bridgeport, Conn., 2,000 6-in. target shell, at $12.97 each; 2,500 6-in. target sheel at $11.87; E. W. BLISS CO., Brooklyn, 3,000 5-in. target steel, with closed-in base, at $7 each; FIRTH-STERLING STEEL CO., Giesboro Point, D. C., 500 6-in. target shell, at $12 each; 2,000 8-in., at $29 each; 1,000 12-in., at $75 each.

UNDERGRADE CROSSING. — Louisville, Ky.—Bids are asked by the Board of Public Works until April 29, for construction of an undergrade crossing in Oak St. under the Illinois Central R. R. tracks. Structure will be 856 ft. long, 55 ft. wide, with reinforced concrete abutments and retaining walls, granite block carriageway and double-track street railway. Approximate quantities include 26,600 cu. yds. of excavation; 4,100 cu. yds. of concrete; 2,400 sq. yds. of granite block pavement; 1,270 sq. yds. brick sidewalk pavement. Estimated cost, $70,000, exclusive of steel superstructure, for which separate contract will be let by Illinois Central R. R. J. P. Claybrook is Ch. Engr., Dept. of Pub. Wks. A. S. Baldwin is Ch. Engr., Illinois Central R. R., Chicago. Noted on March 28.

*CANAL, LATERALS.—Great Falls, Mont.—Bids were received as follows by the United States Reclamation Service on April 3 for constructing twelve miles of main canal, 67 miles of laterals and 17 miles of waste water ditches, Sun River Project, near Great Falls, Mont. The bidders were (A) J. C. Furman, Augusta, Mont.; (B) C. E. Crepeau, Ft. Benton, Mont.; (C) Sequist, Clark & Johnson, Simms, Mont.; (D) Bailey & Dupee, Great Falls, Mont.

Division One:
(No bids received.)
Division Two:

	(A)	(B)
Excavation—		
Class 1, 75,000 cu. yds....	$0.30	$0.35
" 2, 2,000 " "	0.55	0.75
" 3, 200 " "	1.25	1.00
Overhaul, 5,000 cu. yds., per 100 ft.	0.02	.03
Puddling, 500 cu. yds.	1.50	3.00
Total	$24,000	$29,000

Division Three:

	(C)	(D)
Excavation—		
Class 1, 97,000 cu. yds....	$0.30	$0.30
" 2, 500 " "	.60	0.65
" 3, 100 " "	1.20	1.00
Overhaul, 11,000 cu. yds., per 100 ft.	02	.03
Puddling, 200 cu. yds.	2.50	.90
Total	$30,240	$30,035

Division Four:

	(B)	(C)	(D)
Excavation—			
Class 1, 65,000 cu. yds.	$0.30	$0.30	$0.30
Class 2, 5,000 cu. yds	0.75	0.60	0.65
Class 3, 500 cu. yds.	1.00	1.20	1.00
Overhaul, 2,000 cu. yds, per 100 ft....	.03	.02	.03
Puddling, 500 cu. yds.	3.00	2.50	.85
Total	$25,310	$24,390	$23,735

Division Five:

	(B)	(C)	(D)
Excavation—			
Class 1, 75,000 cu. yds.	$0.30	$0.30	$0.25
Class 2, 500 cu. yds.	0.75	0.60	0.60
Class 3, 100 cu. yds.	1.00	1.20	0.90
Overhaul, 16,000 cu. yds., per 100 ft....	.03	.02	.03
Puddling, 200 cu. yds.	3.00	2.50	.50
Total	$24,055	$23,740	$19,720

CONTRACT PRICES.

[Where (*) precedes items under Contract Prices the work was advertised in Engineering News.]

TRESTLES, ETC.—Louisville, Ky.—Bids were received by Capt. H. Burgess, Corps Engrs., U. S. A., Louisville, on April 8, for steel or w.-i. trestles, etc., for Boule dam, as advertised in Engineering News. Bids in detail were submitted as follows: (A) Griffiths Iron Works Co., St. Louis, Mo.; (B) Atlanta Machine Works, Atlanta, Ga.; (C) Penn Bridge Co., Beaver Falls, Pa.; (D) N. J. Foundry & Machine Co., 9 Murray St., New York; (E) G. & W. Mfg. Co., 26 Cortlandt St., New York; (F) Chas. Hegewald Co., New Albany, Ind.

	lbs.	(A) Cts.	(B) Cts.	(C) Cts.	(D) Cts.	(E) Cts.	(F) Cts.
290 w.-i. deck connecting frames....	27,550	4.9	13	19½	12.85	6.16	6.999
290 upstream c.-i. trestle boxes.....	24,290	4.1	3½	4	3.87	2.95	3.249
290 downstream c.-i. trestle boxes...	31,378	4.1	3½	3¾	3.87	2.95	3.249
1,160 1½" w.-i. hold down bolts and nuts	11,430	4	5	4¼	5.11	3.46	4.999
1,160 standard w.-i. washers for 1½" bolts	675	3½	5	4¼	5.11	3.46	4.499
290 1¾" w.-i. upstream trestle box pins	2,390	4	5	6	5.11	3.46	4.999
290 1¾" w.-i. downstream trestle box pins and nuts	3,430	4	5	6½	5.11	3.46	4.999
580 ⅞" w.-i. deck frame bolts and nuts	1,020	4	5	5½	5.11	3.46	4.999
56 angle bars, 20 × 6" × 6" × ½", 19.6 lbs. per ft.	21,952	2.4	4	2.95	2.97	3.04	2.999
4 9" I-beams, 10′ 3" long, 21 lbs. per ft.	860	2.4	4	2.95	2.97	3.04	2.999
280 steel or w.-i. trestles, with hinge blocks and chain connections attached	452,760	4.15	8	8.7	8	6.13	5.499
Total		23,724	43,610	48,521	43,561	32,442	30,262

Proposal not dated, (A), (B), (E); authority for person signing proposal not submitted, (A), (B), (C); unit prices expressed in figures only, (A), (E); guaranty not complete, (C); corporate seal omitted, (C), (E); certified check for amount of guaranty submitted (F).

SEWERS.—Ravenna, Ohio.—Bids were received, as follows, on April 9 for completing sewers in this city. Williams, Proctor & Potts, Inc., 17 Battery Pl., New York, are Engrs. The bidders were: (A) McGary & McGowan, Akron, Ohio; (B) Essex Construction Co., Buffalo, N. Y.; (C) Wilson & Devine, Alliance, Ohio; (D) S. W. Parshall & Co., Akron; (E) McShaffrey & Morgan, Akron; (F) L. Garrett, Kent, Ohio; (G) Phillips & Bixel, Cleveland; (H) T. W. Nicholson, Cleveland; (J) Reserve Construction Co., Cleveland:

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(J)
30,266 ft. laying 8" sewer pipe	$0.40	$0.45	$0.47	$0.32	$0.44	$0.32	$0.50	$0.51	$0.70
9,220 ft. laying 10" sewer pipe	.50	.54	.53	.50	.59	.36	.70	.80	.85
4,446 ft. laying 12" sewer pipe	.55	.55	.58	.50	.60	.46	.70	.75	.89
4,678 ft. laying 15" pipe, 0′-10′ cut	.40	.71	.66	2.30	.70	1.75	.67	.90	.87
765 ft. laying 15" pipe, 10′-15′ cut	1.00	.89	1.28	2.30	1.43	2.30	1.45	1.32	1.38
3,121 ft. laying 15" pipe, 15′-22′ cut	3.00	2.00	2.62	2.30	3.50	4.00	3.50	3.00	3.42
646 ft. laying 18" pipe, 0′-10′ cut	.30	.77	1.76	2.00	.75	.60	.68	1.00	1.10
100 ft. laying 18" pipe, 10′-15′ cut	1.00	.96	1.50	2.00	1.90	1.27	1.50	1.50	1.40
899 ft. laying 18" pipe, 15′-22′ cut	2.90	1.35	2.80	2.00	3.58	*2.75	3.50	3.25	3.50
1,001 ft. 18" concrete sewer, 0′-10′	5.00	2.50	3.25	4.00	....	....	1.50	2.50	2.60
319 ft. 18" concrete sewer, 10′-15′	5.50	3.00	3.75	4.00	....	....	2.50	3.50	4.25
1,553 ft. 18" concrete sewer, 15′-22′	6.00	4.00	5.25	4.00	....	....	4.25	4.75	4.50
5 tons c.-i. culvert pipe	40.00	45.00	40.00	50.00	50.00	35.00	50.00	45.00	48.0
114 manholes, 0′-10′ cut	30.00	35.00	40.00	32.00	30.00	36.00	35.00	31.00	37.5
16 manholes, 10′-15′ cut	32.00	40.00	45.00	40.00	40.00	50.00	45.00	40.00	40.0
10 manholes, 15′-22′ cut	37.00	60.00	60.00	60.00	50.00	60.00	75.00	45.00	45.0
42 flushing manholes	35.00	50.00	50.00	50.00	50.00	65.00	50.00	50.00	55.0
5 rosewater flush tanks	90.00	80.00	80.00	50.00	90.00	85.00	90.00	80.00	80.0
48 lampholes	7.00	10.00	6.00	10.00	9.00	7.00	10.00	9.00	8.5
1,000 ft. foundation lumber, per M	35.00	50.00	35.00	40.00	50.00	45.00	40.00	30.00	30.0
1,000 ft. sheeting, per M	30.00	35.00	30.00	40.00	32.00	30.00	35.00	25.00	18.0
1 yd. rock	2.00	3.00	2.00	10.00	1.75	4.00	2.00	2.50	4.2
1 yd. concrete	7.00	6.00	6.00	10.00	7.00	8.50	5.50	8.50	12.0
4,668 ft. deep house connections, per vert. ft.	.10	.20	.10	.01	.08	.50	.10	.17	.1
1,750 ft. 10" c.-i. siphon, per ft.	1.50	1.75	1.50	1.30	1.80	1.30	1.61	1.60	1.5
600 ft. 8" c.-i. siphon, per ft.	1.05	1.75	1.20	1.30	1.90	.95	1.40	1.40	1.3
Totals*	$44,616	$46,670	$50,491	$50,775	$53,156	$54,903	$56,549	$56,727	$66,42

*Totals are figured without concrete pipe. All vitrified pipe furnished by village.

MEXICO.

The names of parties awarded contracts are printed in capital letters.

ELECTRIC TRAMWAYS—City of Mexico.—Robert C. Brown, Managing Director of the Mexico City Electric Tramways, is now visiting that city, and states that the company will apply for permission for extensions in the Federal District. Several plans have already been prepared, and as soon as endorsed by the government work will commence. W. W. Wheatley, City of Mexico, is Gen. Mgr. of the company.

RAILWAY—Guaymas-Guadalajara.—It is reported that the Southern Pacific Ry. Co. has contracted with the GRANT BROS. CONSTRUCTION CO., of Los Angeles, Cal., to build the entire Guaymas-Guadalajara extension. It is expected that grading from the Guadalajara end of the line will commence within a few months. Work in the state of Sonora is well under way. Epes Randolph has lately been appointed general manager of all the Southern Pacific interest in Mexico.

RAILWAY—Queretaro-Willa de Acambaro.—A concession has been granted to Manuel Rubio for the construction of a railway from Queretaro, capital of the state of Queretaro, to Villa de Acambaro, state of Guanajuato. Surveys must commence within six months of the date of the concession, and the entire line completed within seven years. The road is to be standard gage, and steam, electricity or any other motive power may be used in operation.

RAILWAY—Chihuahua.—It is reported that Col. W. C. Greene has formed, in the United States, a new corporation named the Sierra Madre and Pacific Railroad Co., capitalized at $6,000,000, gold, to build the extension of the Rio Grande, Sierra Madre and Pacific Ry. from San Diego, Chihuahua, work on the extension from that point having commenced. The first objective point is Santo Tomas, on the Chihuahua and Pacific railway, and the line will terminate at La Dura, state of Sonora, where connection will be made with the Cananea, Yaqui and Pacific line now under construction. The total length of extensions is about 400 miles. Location has been completed from San Diego to Santo Tomas, a distance of 180 miles, and it is expected to finish this within two years.

RAILWAY—Sonora.—It is reported that the Cananea, Yaqui River and Pacific Ry. Co. has contracted with the GRANT BROS. CONSTRUCTION CO., of Los Angeles, Cal., for construction of the road from Beunavista to Tonichi, a distance of about 80 miles up the Yaqui River, and from a point 15 miles from Corral to Alamos, a distance of 68 miles, both in the state of Sonora. The Cananea, Yaqui River and Pacific road is being built by the Southern Pacific Co. to open up the Yaqui River territory, connecting with the Sonora railway, which will, eventually, extend from the Southern Pacific, at Benson, Ariz., to Guadalajara, to the Yaqui River road terminating at Cananea, or possibly extending beyond that point to a connection with the Southern Pacific line through Arizona.

READERS' WANTS

If you are in the market for material, equipment or supplies, and fail to find it in our advertising pages, send us full particulars, and we will gladly put you in touch with the right parties.

Also ask for our BUYERS' GUIDE

METAL PIPE—Slatington, Pa.—We are advised by Horn & Neff, Slatington, Pa., that they desire information relative to makers of corrugated metal culvert pipe.

CONCRETE PIPE—Troy, N. Y.—F. C. Filley, Troy, N. Y., writes us that he wishes names of firms manufacturing concrete pipe and machines for making the pipe.

TRENCH MACHINE—Cimarron, N. M.—Norman Wilkins, Cimarron, N. M., writes us that he desires to get in touch with manufacturers of trench excavating machines.

ELECTRIC BUFFER—Wichita, Kan.—W. C. Edwards, Jr., Winne Bldg., Wichita, writes that he is in the market for an electric buffer suitable for finishing composition floors.

CONTRACTOR'S EQUIPMENT.—Stockholm, Sweden.—A. Hansson, General Contractor, Stockholm, Sweden, is in the market for contractor's equipment and desires information and catalog.

PAPER MACHINERY—San Francisco, Cal.—We are requested by V. L. Havens, Ch. Engr., P. & F. R. R., San Francisco, Cal., for information relative to manufacturers of wood pulp paper machinery.

FREIGHT AND PASSENGER AUTOMOBILES.—S. Paulo, Brazil.—Joao Blendo, Rua Marauham, 14 S. Paulo, Brazil, desires catalogs descriptive of passenger and freight automobiles for heavy service.

SHALE BRICK MACHINERY—Thorice, Mich.—We are informed that Grant, Smith & Co., Thorice, Chippewa Co., Mich., desire information concerning the machinery and methods of manufacturing shale brick.

CONVEYORS—New York City.—We are advised that E. L. Mills, Room 1600, 15 William St., New York City, desires catalogs and information relative to conveyors, both bucket and belt for handling coal, grain, etc.

CEMENT BLOCK MACHINES—Alexandria Bay, N. Y.—John S. Keeler, C. E., writes us that he desires to correspond with firms making cement block or brick machines of about 1,000 block or eight to ten thousand brick capacity per day.

CATALOGS.—Greensboro, N. C.—E. W. Myers, Civil Engineer, Greensboro, N. C., desires catalogs pertaining to steel and reinforced concrete construction, water power and electrical machinery, water-works and sewerage system supplies.

CIVIL SERVICE EXAMINATIONS.

LABORATORY HELPER.—Washington, D. C.—An examination will be held on May 9 by the U. S. Civil Service Commission to secure eligibles from which to make certification to fill at least six vacancies in the position of Laboratory Helper, at $600 a year each, in the Bureau of Chemistry, Department of Agriculture, at Washington and in other cities in which the Department has established chemical laboratories, and similar vacancies as they may occur. Vacancies in this position are constantly occurring. Age limit, 18 years. Application form, 1312.

ENGINEER.—Jefferson Barracks, Mo., and Fort H. G. Wright, N. Y.—An examination will be held by the U. S. Civil Service Commission on May 1 (postponement of examination scheduled for April 10) to secure eligibles from which to make certification to fill a vacancy in the position of Electrical Engineer, at $1,500 a year, in the Quartermaster's Department at Large, Jefferson Barracks, Mo., a vacancy in the position of Engineman, at $900 a year, in the Quartermaster's Department at Large, Fort H. G. Wright, N. Y., and vacancies as they may occur in any branch of the service requiring similar qualifications. Age limit, 20 years. Application form, 1093.

ASSISTANT CHEMIST.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on May 8 to secure eligibles from which to make certification to fill such vacancies as may occur in the positions of Assistant Chemist and Laboratory Assistant in chemistry in the Bureau of Standards, at salaries varying from $900 to $1,600 a year, and vacancies as they may occur in any branch of the service requiring similar qualifications. The duties in connection with these positions are identical with those of the assistants in the chemical laboratories of scientific and technical institutions. As far as practicable appointees are assigned to work in the subjects for which they are best fitted. Age limit, 20 to 35 years. Application form, 1312.

ARCHITECTURAL DRAFTSMAN.—New York, N. Y.—Following are the candidates eligible for position of Architectural Draftsman, examination, April 8:

John Muller, 103 Oak St., Brooklyn	92.40
N. Grant Kelsey, 40 Margaret Ave., Crestwood, Yonkers	91.20
Harold D. Vernam, 775 East 32d St., Brooklyn	90.80
George Fuchs, Jr., 777 Elton Ave., Bronx	88.80
Charles A. Kneppler, 575 Evergreen Ave., Brooklyn	87.00
Vernon W. Houghton, 530 West 112th St.	86.80
Fred A. Gardner, 247 Cumberland St., Brooklyn	86.40
Robert P. Vreeland, 108 West 61st St.	84.40
Samuel Landsman, 445 West 40th St.	84.20
Warren Keenan, 12 Commerce St.	83.00
Wm. A. P. Schmidt, 52 Union Pl., Brooklyn Hills, Queens	83.00
Harold E. Martin, 1086 Bushwick Ave., Brooklyn	82.40
Carl G. Grosselfinger, 606 East 84th St.	80.40
Ernest W. Ruestow, 225 Merrick Rd., Rockville Centre, L. I.	80.20
Jaroslav Kraus, 1014 Second Ave.	81.80
Rudolph H. Bschaidner, 724 East 140th St.	80.00
Henry Schneider, 2794 Eighth Ave.	78.80
George M. Sprague, 33 Green Ave., Brooklyn	78.00
Jesse E. Smith, 354 73d St., Brooklyn	77.80
Mortimer Steinfels, 193 Shelton Ave., Jamaica, L. I.	77.80
Harry E. Schaefer, 112 East 87th St.	77.00
Herbert H. Rice, 105 East 116th St.	77.00
Wallace A. Hodgkins, 66 St. James Pl., Brooklyn	77.00
Charles H. Trumpler, 234 Putnam Ave., Brooklyn	76.00
Henry Irving, 544 West 156th St.	76.00
John R. Lautenbach, 19 East 45th St.	75.80
Hugh T. Lawrence, Park and Godwin Aves., Wortendyke, N. J.	75.60
James J. Bacon, 242 Mulberry St.	74.00

COMPUTER.—New York, N. Y.—Among those eligible for the position Computer, from examination for Transitman and Computer, held March 21, in New York, are:

Clifford M. Pinckney, 73 North Ave., New Rochelle, N. Y.	99.00
Patrick Quilty, 214 West 16th St.	97.00
Thomas M. Kelly, 5 Anderson Ave., Port Richmond, S. I.	97.00
Philip L. Haas, 886 East 163d St.	96.00
Robert W. Wood, 26 Post Ave., West New Brighton, S. I.	94.00
William T. Doyle, Croton Falls, N. Y.	93.00
Charles Tilgner, 782 Halsey St., Brooklyn	92.00
William L. Selmer, 91 Hamilton Park, New Brighton, S. I.	92.00
Francis C. C. Grosselfinger, 605 East 83d St.	91.00
Clarence R. Van Deuser, 120 South Vine St., Richmond Hill, L. I.	91.00
Louis H. Lubarsky, 1701 Lexington Ave.	89.00
Thomas B. Oakley, 10 Trinity Pl., West New Brighton, S. I.	89.00
Robert J. Lucas, Heath Ave., Kingsbridge	89.00
John E. Hill, 330 Clermont Ave., Brooklyn	88.00
William J. Dunsing, 50 Drew Ave., Union Course, L. I.	88.00
Harry H. Weinstock, 104 Lenox Ave.	88.00
Herman Moseson, 1341 Clinton Ave., the Bronx	88.00
Jacob G. Rubenstein, 222 Henry St.	87.00
Robert J. O'Meara, 311 East 124th St.	87.00
Grey S. Lavin, care Department of Water Supply, Gas and Electricity, High Bridge	87.00
Edward P. Murray, Katonah, N. Y.	85.00

ASSISTANT PHYSICIST.—Washington, D. C.—An examination will be held on May 8, by the U. S. Civil Service Commission, to secure eligibles from which to make certifications to fill such vacancies as may occur in the positions of Laboratory Assistant and Assistant Physicist in the Bureau of Standards, at salaries varying from $900 to $1,600 a year, and vacancies as they may occur in any branch of the service requiring similar qualifications. The duties in connection with these positions are identical with those of the assistants in the physical laboratories of scientific and technical institutions. As far as practicable appointees are assigned to work in the subjects for which they are best fitted. Age limit, 20 to 35 years. Application form, 1312.

CHIEF ENGINEER.—Chicago, Ill.—The U. S. Civil Service Commission announces an examination on May 8 to secure eligibles from which to make certification to fill a vacancy in the position of Chief Engineer in the United States post-office and court-house building at Chicago, Ill., and vacancies as they may occur in the Custodian Service throughout the United States requiring similar qualifications. The salary of the specific position to be filled will be from $1,800 to $2,500 a year, the entrance salary to be at $1,800. The equipment of the building includes high-pressure speed hydraulic elevators with both compound Corliss gear flywheel pump and compound high-duty duplex pumps; high-pressure boilers and steam auxiliaries; mechanical ventilating system with automatic thermostatis temperature control; a complete system of electrical distribution for light and power; modern plumbing and sanitary equipment, including a motor-driven Shone sewerage ejection system, and a complete internal system of pneumatic tubes and mechanical mail conveyors. Age limit, 18 to 55 years. Application form, 1052.

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INDUSTRIAL NOTES.

HYDE BROTHERS & CO., Pittsburg, announce the removal of their offices to Suite 1610, Commonwealth Bldg.

THE McKELVEY MACHINERY CO., Cleveland, O., has opened a branch office in the Machinery Bldg., Pittsburg, Pa.

GLAFEY & PLAGWITZ, Engineers, Pittsburg, Pa., announce the removal of their offices from the Frick Bldg. to the Commonwealth Bldg.

HOBSON & CO., Easton, Pa., advise us that their main office has been removed to the works at Easton and that the export office will be located at 11 Broadway, New York, in charge of Mr. David S. Hays, Agent.

ON MAY 1ST the Clinton Wire Cloth Company, Clinton, Mass., will remove its New York office from 33 Park Place to 261 Broadway. At the same time the Chicago office will be removed from 237 Lake St. to 30 and 32 River St.

THE PRESSED STEEL CAR CO., Farmers Bank Building, Pittsburg, announces that the office of the manager of sales of the western district, Pressed Steel Car Co., has been moved from the Fisher Bldg. to the Old Colony Bldg., Chicago, and all communications should hereafter be forwarded to the new address as given above.

THE NATIONAL WOOD PIPE CO. announces that its San Francisco office, which has been temporarily located at 301 Market St., has been permanently located in larger and better quarters in the new reinforced concrete Hansford Building, 268 Market St. This building is located at the corner of Market and Davis Sts., opposite the old location.

J. H. WAGENHORST & CO., of Youngstown, O., report the following as a partial list of their recent sales of electric blue printing machines: Westmoreland Coal Co., Irwin, Pa.; Casey & Hedges Co., Chattanooga, Tenn.; the Norton Co., Worcester, Mass.; Eugene Dietzgen Co., San Francisco, Cal.; U. G. Charles, Wichita, Kan.; Yawman & Erbe, Rochester, N. Y.; H. E. Ahrens & Bro., Lewiston, Pa.

THE NEW YORK BRANCH of the Green Fuel Economizer Co. has removed to the new West Street Building, No. 90 West St. The new offices will be considerably larger than the old, in order to take care of the increasing business in economizers, fans, blowers and exhausters. The Green Fuel Economizer Company's New York representative is Mr. William Downs, who has occupied the old offices at No. 74 Cortlandt St. since 1889.

M. RONCERAY, from Ph. Bonvillain & E. Ronceray, Paris, Machine Tools Importers and Manufacturers of Molding Machines, will present Bonvillain & Ronceray's Molding Machines at the American Foundrymen's Association Exhibition, to be held in Philadelphia, May 20th to 24th. At the same time he will visit the principal machines-tools manufacturers, so as to establish connections for the sale of their machines in Europe.

THE SEELY-TAYLOR CO., 78-80 Broad St., New York, announces that its business has been merged with a new corporation under the title Maritime Dredging Co., which will continue the business of the old corporation at the same address. In addition to dredging the company proposes to do general contracting and water front improvements. Charles F. Taylor, Pres.; John A. Seely, Vice-Pres.; Frank J. Murphy, Secy.-Treas., are the officers.

THE OHIO VALLEY FINANCE COMPANY, which is building an electric railroad from East Liverpool to Steubenville, Ohio, has concluded a contract with the Westinghouse Companies for the power-house equipment that will operate the road. This will include three 1,000-HP. Westinghouse-Parsons steam turbines, three electric turbo-generators of a corresponding capacity, as well as rotary converters and requisite switchboard apparatus.

ON MAY 1ST the Chicago branch of Niles-Bement-Pond Company will occupy their new offices on the sixth floor of the new Commercial National Bank Building, Clark and Adams Sts., Chicago. Pratt & Whitney Company will abandon their show room and offices at Nos. 46-48 South Canal St., and will combine their machinery sales department with that of Niles-Bement-Pond Co. The show room and stock of Pratt & Whitney small tools and the Small Tools Sales Department will be located on the ground floor of the new Plamondon Building, Clinton and Monroe Sts., where a complete line of Pratt & Whitney Small Tools and Gages will be carried in stock. Mr. Geo. F. Mi[illegible] who has for several years looked after the interests of these companies in the Chicago territory, will continue as manager of the Chicago offices.

THE CALUMET STEEL COMPANY has just been formed and will have temporary offices in the Western Union [illegible], Chicago. J. H. Porter and S. S. Porter, formerly with the Buffalo Steel Co., of Tonawanda, N. Y., and A. S. Hook, formerly with the Inland Steel Co., are among the officers. The new company will make a specialty of steel bars for reinforcing concrete. Mill [illegible] will be in charge of J. J. Worker, formerly with the Republic Iron & Steel Co., Moline, Ill.

THE McCONWAY & TORLEY CO., Pittsburg, Pa., informs us that a large number of its rail joints are in use on electric railways. One of the largest users is the United Railways & Electric Co., of Baltimore, Md., which has several thousands in service. The device consists of two clamps, which grip the top and bottom of the rail flange; they extend across the bottom of the rail and are drawn together by a single transverse bolt. It is claimed to hold up the ends and prevent low joints.

HENRY R. WORTHINGTON announces that, due to the increase in business in New Jersey, he has found it essential to establish an auxiliary sales department at the Hydraulic Works, Harrison, N. J. This department will be in charge of Mr. [illegible] Brooks, who for the last three years has represented Henry R. Worthington in this territory. It will be devoted entirely to the interests of its customers in New Jersey, and by reason of its location will be able to give them the most prompt and careful attention. Phone 2970 Newark.

THE PATERSON BRASS FOUNDRY has been incorporated under the laws of the State of New Jersey, capital stock $25,000, as manufacturers and finishers of brass castings for general use and mixers of metals for special requirements, including brass, bronze, babbit, composition and aluminum castings. The works and general office will be at 42 Van Houten St., Paterson, N. J.; New York office, 10 Wall St. The officers of the company are P. O. Dixon, Pres.; Samuel Hart, Vice-Pres. and Gen. Mgr., and O. O. Dixon, Secy. and Treas.

THE CLEVELAND-CLIFFS IRON CO. has placed an order for a 60-drill Sullivan Air Compressor for its new Maas Mine at Negaunee, Mich. The machine will be of the Corliss Cross Compound condensing two-stage type, with large receiver inter-cooler. The steam cylinders will be 24 × 46 inches in diameter, with a 48-inch stroke, and the air cylinders 40 × 24 × 48 inches, with a displacement capacity of 4,000 cu. ft. of free air per minute at 60 R. P. M., or nearly 5,000 ft. at 70 R. P. M. The compressor will be built at the Chicago works of the Sullivan Machinery Co.

THE DANVILLE CAR CO., of Danville, Ill., has completed its new works for the manufacture of passenger and freight cars for steam and electric railways. It will also build electric locomotives and make a specialty of the repair of steel cars. The plant includes an erecting shop 320 × 150 ft.; freight car shop, 320 × 90 ft.; truck and machine shop, 120 × 120 ft., and woodworking, cabinet, varnishing, and blacksmith shops, etc. The works were built by the H. F. Vogel Contracting & Railway Supply Co., of St. Louis. Mr. H. F. Vogel, formerly Vice-President and General Manager of the St. Louis Car Co., is President of the Danville Car Co., at Danville, Ill.

THE CITY OF RHINELANDER, WIS., is to have an addition to the pumping capacity of its water-works in the form of an Allis-Chalmers four-stage centrifugal pump, driven by a 75-HP. Allis-Chalmers induction motor, recently purchased. The combined pumping unit will present the neat and compact appearance inherent in Allis-Chalmers pumps of that type. The unit is to be a horizontal shaft, four-stage centrifugal pump, coupled to an induction motor of 75-HP., wound for 3-phase, 60 cycles, constant speed type mounted on the same base. At full load the capacity of this unit will be 750 gallons per minute, with the motor running at a speed of 1,150-RPM. The total head against which the pumps will operate is 231 ft.

THE DEAN BROS. STEAM PUMP Works, Indianapolis, Ind., advise us that they have supplied 6 new pattern duplex pumps to the U. S. Government for use on the Panama Canal. This duplex pump is designed for bolting to a wall in vertical position and occupies but little room and may be put in any out-of-the-way place. It is of heavy construction, designed for a working pressure of 150 lbs. to the square inch. The pump cylinder is made with valve plate and cover, the best form for quick and complete access to the valves. Vertical pumps have been made with side hand hole plates, and valves are set into cylinder so that they are very difficult to get at. The frame is of heavy finished steel rods, making a rigid and extra strong connection, and leaving stuffing boxes and parts of pumps so that they are easily reached by the engineer. The valve gear is made without rock shafts and is supported on finished steel rods. The valve levers for moving valves are both alike and interchangeable.

THE WALLACE-COATES ENGINEERING CO., Ellsworth Building, Chicago, states that since the first Strauss bascule bridge was put in operation at Cleveland, O., in October, 1905, eight other bridges of this class have been put under construction. These include the New Jersey Short Line Ry. bridge at Rahway, N. J.; the Baltimore & Ohio Ry. bridge over Bodine Creek; the Miami & Erie Canal bridge at Lockland, O.; and the Missouri Pacific Ry. bridge over the Black River. The bridges at Copenhagen (Denmark) and at Camden, N. J., are also well under way. A double-track single leaf bascule bridge of the Strauss type is to replace the swing bridge of the Chicago & Northwestern Ry. crossing the north branch of the Chicago River at the entrance to the terminal station; the contract includes a similar span to be built alongside the first one within five years. The company is also building three concrete

bridges of the Strauss ribbed-arch system at Spokane, Wash., and a 1,500 ft. reinforced-concrete viaduct of the Strauss design. It is building three large cement bins at Buffington, Ind., and has a large amount of other steel and concrete bridge and construction work in hand.

THE STONE & WEBSTER ENGINEERING Corporation, of Boston, Consulting and Operating Engineers, acting for the Boston Elevated Railway, recently placed contracts for two large Allis-Chalmers direct current railway generators which rival in size and capacity any machines of a similar type in the country. These machines, which are to be installed in the new extension to the Boston Elevated Railway Company's Lincoln Wharf Station, on Atlantic Ave., are to have a capacity of 2,[illegible]-KW., 600 volts, and operate at a speed of 75-RPM. In this station is generated the larger portion of the current used for operating the elevated railway division and the cars through the East Boston tunnel. The Allis-Chalmers Generators, which will be driven by vertical cross compound engines, will have armatures of such diameter that they will have to be built up on the ground. Each machine will have 32 poles; will have no band wires on the armature, and will be equipped with the Allis-Chalmers patented brush oscillating device, by means of which the brushes travel back and forth on the commutator in a direction parallel with the engine shaft, thus keeping the commutator in perfect condition and avoiding the usual wearing grooves.

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TRADE PUBLICATIONS.

MAIL CHUTE.—U. S. Mail Chute Equipment Co., Fullerton Bldg., St. Louis, Mo. Paper; 4 × 8¾ ins.; pp. 12; illustrated.

The security mail chute manufactured by this company is fully described.

STEAM ENGINES.—The Lane & Bodley Co., Cincinnati, O. Bulletin No. 101; paper; 9 × 6 ins.; pp. 8; illustrated.

High speed engines are described, the principal dimensions and weight being given.

PASSENGER CAR EQUIPMENT.—The McConway & Torley Co., Pittsburg, Pa. Paper; 9 × 12 ins.; pp. 10; illustrated.

Modern steel passenger cars, Buhoup 3-stem couplers and Buhoup vestibules are illustrated and briefly described.

AIR COMPRESSOR OUTFITS.—Abenague Machine Works, Westminister Station, Vt. Paper; 6 × 9 ins.; pp. 8; illustrated.

Portable gas engine driven compressors are described. These outfits are made for any pressure and in several different sizes.

SWITCH STANDS.—U. S. Wind Engine & Pump Co., Batavia, Ill. Paper; 5¼ × 9 ins.; pp. 19; illustrated.

This catalogue gives many illustrations of different styles of "U. S." switch stands and masts. There is very little descriptive matter.

AIR HEATERS.—The Green Fuel Economizer Co., Matteawan, N. Y. Paper; 6 × 9 ins.; pp. 8; illustrated.

The title of this booklet is "How to Save 15% of the Coal in Making Water Gas," and it explains the manner of operating a Green air heater in connection with a gas plant.

STANDPIPES AND WATER TOWERS.—Des Moines Bridge & Iron Works, Des Moines, Iowa. Paper; 5¾ × 8¾ ins.; pp. 52; illustrated.

Many illustrations of towers and standpipes erected by this company are given, together with some brief notes on water-works construction.

BOILER, TANKS, ETC.—National Boiler & Sheet Iron Works, Indianapolis, Ind. Paper; 9¼ × 6 ins.; pp. 42; illustrated.

This is a catalogue illustrating the different work done by this company. It includes boilers, tanks, self-supporting steel chimneys, etc.

VERTICAL STEAM ENGINES.—B. F. Sturtevant Co., Hyde Park, Mass. Bulletin 125; paper; 6½ × 9 ins.; pp. 8; illustrated.

The Sturtevant class V S 5 high speed non-condensing engines are described. These engines are made in many sizes and for various steam pressures.

GRINDING WHEELS.—Norton Co., Worcester, Mass. Paper; 3¼ × 6 ins.; pp. 12.

Alundum, a new abrasive developed by this company, is discussed in this booklet. The company claim that wheels of this material are adapted to all kinds of grinding and are extremely fast cutters.

ELECTRIC CONTROLLERS.—The Cutter-Hammer Mfg. Co., Milwaukee, Wis. Paper; 6¼ × 8½ ins.; pp. 11.

This booklet under the title of "A Tale of Two Types" compares and discusses the advantages and disadvantages of ventilated and enclosed resistances.

CONCRETE MACHINERY AND CONCRETE BLOCKS.—National Concrete Machinery Co., [illegible]11 Grand Ave., Milwaukee, Wis. Paper; 10 × 6¾ ins.; pp. 63; illustrated.

The machinery includes a concrete mixer of the continuous type and molds for concrete posts and various styles of building blocks. The illustrations show the machines, the blocks and buildings of dierent classes constructed of these concrete blocks.

VENTILATING FANS.—Allis-Chalmers Co., Milwaukee, Wis. Bulletin 1418. Paper; 8 × 10½ ins.; pp. 12; illustrated.

Double-intake center draft type of fans are described, ranging in size from 12 to 35 ft. in diameter. A test of a 28-ft. fan located at the Henry Colliery, Wilkes Barre, Pa., is noted.

HIGH SPEED STEEL.—J. Beardshaw & Son, Ltd., Baltic Steel Works, Sheffield, England. Paper; 3¼ × 4¾ ins.; pp. 32; illustrated.

After describing the proper manner of working this class of steel some space is given to tests carried out to test the quality of this company's product.

PIPE-THREADING MACHINERY.—D. Saunders' Sons, Inc., Atherton St., Yonkers, N. Y. Paper; 6¾ × 10¼ ins.; pp. 131; illustrated.

This company's line of pipe cutting, threading, and nipple machines is fully described, as are also their accessories, such as dies, chucks, taps, reamers, vises, etc.

"METHODS AND WORK."—Dodge & Day, Drexel Bldg., Philadelphia, Pa. Pamphlet No. 16. Paper; 9 × 12 ins.; pp. 8; illustrated.

This bulletin gives a short history of the organization of Dodge & Day, Engineers, and describes their mode of doing work, preparing plans and specifications, etc.

BUCKETS.—The Hayward Co., 97-103 Cedar St., New York City. Paper; 6 × 3½ ins.; pp. 17; illustrated.

This booklet is a net price list of the orange-peel and clam-shell buckets manufactured by this company. The principal dimensions of the buckets, open and closed, are given, together with their capacities.

ENGINEERING INSTRUMENTS.—Bausch & Lomb Optical Co., Rochester, N. Y. Paper; 6 × 9 ins.; pp. 8; illustrated.

Engineers' transits and levels manufactured by the Bausch, Lomb, Saegmuller Co. are described. These instruments are fitted with variable power eyepieces which make possible a change of power from 12 to 25 diameters.

NOZZLE PIEZOMETER. — The American Nozzle Piezometer. American Steam Gage and Valve Mfg. Co., Boston. Paper; 8½ × 11 ins.; pp. 4; illustrated.

This instrument for indicating the nozzle flow of a stream of water was invented by Prof. Frank B. Sanford, and fully described by him in Engineering News, Sept. 13, 1906.

WELL SCREENS.—E. E. Johnson, St. Paul, Minn. Paper; 3¼x6½ ins.; pp. 8; illustrated.

The Johnson well screens are built up spirally and are provided with inlet slots, accurately cut to desired size in the successive inlet rings. Lead packers and sledge blocks and bars for expanding the packers are listed in the catalogue. Prices are quoted.

TRACK TOOLS.—Kalamazoo Railway Supply Co., Kalamazoo, Mich. Paper; 6 × 9¼ ins.; pp. 36; illustrated.

Handcars of various designs occupy about 25 pages, the balance being devoted to jacks, rail drills, gages, rail benders, etc. Cattle-guards and railway water tanks are also included. One of the handcars, for electric railways, has a tower for use in repairing trolley wires, etc.

SNOW PLOWS.—Russell Car & Snow Plow Co., Ridgway, Pa. Paper; 10½x7 ins.; pp. 32; illustrated.

The Russell snow plow for steam and electric railways is here shown in various designs, with and without flanges and side wings. Double-ended plows are included, and also a flanger car. Particulars are given of some of the work done by these machines, and there is a list of over 40 railways using them.

VARIABLE SPEED GEAR.—The S. & S. Engineering Co., 581 Park Pl., Brooklyn, N. Y. Paper; 9½ × 12 ins.; pp. 4; illustrated.

The S. & S. variable speed gear is described. Variation of speed is obtained by expanding and contracting two expansion pulleys belted together. Table of sizes, principal dimensions, and price are given.

PULVERIZING MACHINERY.—Abbé Engineering Co., 220 Broadway, New York City. Paper; 6 × 9 ins.; pp. 92; illustrated.

This company's pebble mills are made in all sizes from small laboratory mills to mills of 4,000 lbs. capacity. The Abbé tube mills, "Max" mills and rotary cutters are also described. Weights and space occupied by each machine is given.

STORAGE BATTERIES.—The Westinghouse Machine Co., East Pittsburg, Pa. Catalogue S. Paper; 6 × 9 ins.; pp. 31; illustrated.

The Westinghouse Type S battery for stationary service is described. This is a pure lead, sulphuric acid battery, with the active material formed into the lead itself. Tablets giving the number and size of plates for various size batteries are appended.

ROOFING.—Barret Mfg. Co., New York and Chicago. Paper; 4½ × 7 ins.; pp. 12; illustrated.

This pamphlet contains the company's specifications for various styles of roofing covered with felt and pitch.

ELECTRIC FANS AND FAN MOTORS.—The Emerson Electric Mfg. Co., St. Louis, Mo. Paper; three pamphlets; 5¼ × 7¾ ins.; pp. 16, 32, 48; all illustrated.

These fans are of the small class for desk and office use, of various styles, and with either direct-current or alternating-current motors. Prices are given for complete outfits and for repair parts.

WATER COLUMNS.—American Valve & Meter Co., Cincinnati, Ohio. Paper; 6 × 9 ins.; pp. 60; illustrated.

The Poage automatic water column is described, with details of spouts, valves, tank indicators, and other parts. One of the specialties is the Fenner drop spout, having a wide range of adjustment.

FINISH FOR CONCRETE SURFACES.—John K. Irvine, Sioux City, Iowa. Paper; 7¼ × 4¾ ins.; pp. 16; illustrated.

This finish is the acid wash treatment patented by H. S. Richards and the late Wm. Black, C. E. It has been used on various kinds of work at the Chicago parks, and is now being introduced commercially. The illustrations show some excellent results.

REINFORCED CONCRETE CONSTRUCTION.—The Ferro-Concrete Construction Co., Cincinnati. Bulletin 0-28. Paper; 10¼ × 7¾ ins.; pp. 16.

This bulletin contains photographs, descriptions and testimonials of various structures built by this company which would come under the head of offices, hotels, theaters, hospitals, banks, and such light construction buildings.

RAIL FASTENING.—Maryland Railway Supply Co., 510 Continental Building, Baltimore, Md. Paper; 8½ × 10½ ins.; pp. 4; illustrated.

The fastening consists of a common spike and a "spike strut" so shaped as to drive at an angle of about 45°, its head bearing is against the back of the spike head so as to brace it against lateral thrust. It does not appear that the device is in use.

CRUCIBLES.—Joseph Dixon Crucible Co., Jersey City, N. J. Paper; 6 × 9 ins.; pp. 40; illustrated.

This book is written by Mr. John A. Walker for the purpose of informing the user of crucibles as to their nature and characteristics. Suggestions are given as to their care and handling, which will, if followed, add to their efficiency and greatly prolong their period of usefulness.

"PROGRESS REPORTER." — Niles-Bement-Pond Co., 111 Broadway, New York City. No. 15. Paper; 9 × 12 ins.; pp. 15; illustrated.

This number of the Reporter is given over to descriptions of a Pratt & Whitney 16-in. tool-makers' lathe, variable speed and special planers, pneumatic clutches, and other machinery such as turret lathes, radial drills, hydraulic presses and boring machines.

WIRE ROPES.—Macomber and Whyte Rope Co., Chicago. Paper; 3½ × 5¾ ins.; pp. 12; illustrated.

This company has a special patented wire rope called "Kilindo," which is wound differently from the ordinary wire rope, and which in consequence is claimed to give 200% greater wearing surface, greater pliability and increased strength over the ordinary.

ACETYLENE GAS GENERATORS.—Davis Acetylene Co., Elkhart, Ind., and 738 National Life Building, Chicago. Paper; 3½ × 6¼ ins.; pp. 4; illustrated.

These generators use lump carbide and have independent power for feeding. They are of 35 to 100 lbs. capacity, for residences, hotels, stores, etc., and are also used in the wrecking-train equipments on the Lake Shore & Michigan Southern Ry.

FLUSHING SIPHONS.—The De La Hunt Flush Tank Co., Cedar Rapids, Ia. Paper; 5½ × 8 ins.; pp. 20; illustrated.

These automatic siphons are for flushing sewers, septic tanks, etc., and their construction and operation are described. A special feature is an alternating siphon for operating sewage disposal plants, and it dispenses with the aid of auxiliary pipes, blow-off traps, etc. A number of recent testimonials are given.

SEWAGE TREATMENT.—Merritt & Co., 1022 Ridge Ave., Philadelphia, Pa. Paper; 6 × 9¼ ins.

In connection with short advertisements of the Merritt automatic air-lock sluiceways, automatic sewage lifts, sewage siphons and other sewage disposal apparatus, this company issues from time to time bulletins entitled "Progress in Sewage Treatment." No. 4 contains a paper on "The Tankage of Sewage," by F. W. Stoddart (Borough Analyst, Bristol, England). The paper was read recently before the Royal Institute of Public Health. In addition to the paper named, there is a list of recent literature on sewage treatment, giving title, author, place and date of publication of various articles.

HOISTING ENGINES AND MINING MACHINERY.—Riverside Iron Works Co., Central Ave. and Fourth St., Kansas City, Mo. Paper; 9½ × 6¼ ins.; pp: 24; illustrated.

This is a descriptive pamphlet of direct and geared mine hoisting engines, both steam and electric; also ventilating fans, mine cars and cages, hoisting rope and sheaves. There is also a track scale for use on the surface tracks.

WATER TUBE BOILERS.—The Roberts Safety Water Tube Boiler Co., 39 Cortlandt St., New York, N. Y. Paper; 9 × 6 ins.; pp. 19; illustrated.

This boiler has been extensively used for marine work of the smaller class. It is composed of pipe coils forming a cubical mass, connected with horizontal headers on each side of the grate and with a steam drum on top. The construction is described and illustrated in detail.

RAILWAY COALING STATIONS, WATER TANKS AND ASH PLANTS.—Roberts & Schaefer Co., Old Colony Building, Chicago. Paper; 6 × 9 ins.; pp. 16; illustrated.

A number of plants are illustrated and briefly described, the coaling stations including the Holmen bucket type and belt and bucket conveyors. Some of the water tanks and coal pockets are of reinforced concrete. Lists are given of coal mining plants and coal washeries built by this company.

TRACTION ENGINE AND EXCAVATOR.—Avery Mfg. Co., Peoria, Ill. Paper; 7 × 6 ins.; pp. 6; illustrated.

These engines have two cylinders, placed beneath the boiler as in locomotive practice; they are shown in use for farm work, railway grading and general hauling. The steam shovel or excavator is a traction engine with a revolving derrick carried on an extension of the frame and handling a bucket mounted on the end of a boom. All operations are controlled from the cab.

LOCOMOTIVES.—Baldwin Locomotive Works, Philadelphia, Pa. Paper; 9x6 ins.; pp. 32; illustrated.

This is No. 60 of the firm's bulletins and contains a paper on "The Actual Efficiency of a Modern Locomotive," read by Mr. W. P. Evans before the Pacific Coast Railway Club. There is also a description of the "extra work" department of the locomotive works, where extra parts and duplicates are manufactured. The illustrations represent a number of locomotives of different types.

BASCULE AND ARCH BRIDGES.—Wallace-Coates Engineering Co., Ellsworth Building, Chicago. Paper; 10 × 7 ins.; pp. 80; illustrated.

This pamphlet deals with the Strauss type of bascule bridge and ribbed-arch concrete bridge, and includes a discussion of the special features of the bascule bridge, which is of the fixed trunnion class. A number of line drawings and half-tone engravings represent bridges designed and built. The Strauss design for an elevated railway structure of reinforced concrete is also described and illustrated.

REINFORCED CONCRETE CONSTRUCTION.—John G. Brown, Witherspoon Bldg., Philadelphia. Paper; 5¼ × 8½ ins.; pp. 50; illustrated.

Mr. John G. Brown was formerly connected with one of the large reinforced concrete construction firms and in his capacity as general manager superintended the design and erection of a great amount of their work. He has recently opened an office as contracting engineer, specializing in reinforced concrete and has issued this pamphlet as a prospectus of the kind of work and methods that he is to employ. It is one of the best of the concrete catalogues, as an aid to a better understanding in the lay mind of the principles of reinforced concrete. The explanations are simple and the deductions correct, yet impartial.

WATER TOWERS AND STAND-PIPES.—The Chicago Bridge & Iron Works, Throop and 105th Sts., Chicago. Paper; 4½ × 7¾ ins.; pp. 63; illustrated.

This pamphlet is devoted mainly to water tanks elevated on tall steel towers; the largest of these (and the largest ever built) is of 1,200,000 gallons capacity, and with a height of 220 ft.; this is at Louisville, Ky. Steel reservoirs and railway tanks having large riser pipes which carry a proportion of the weight, are shown; the latter are in use on about 30 railways. Other specialties are steel chimneys, tie-preserving retorts, and bridges. There is a tabulated list of nearly 700 tanks and stand pipes, with their height, capacities and owners. Several pages are devoted to tables of tank capacity, fire streams, weight of pipe, etc.

LOCOMOTIVES.—American Locomotive Co., 111 Broadway, New York, N. Y. Paper; 9 × 6 ins.; pp. 72; illustrated.

This pamphlet is devoted to engines of the ten-wheel or 4-6-0 type weighing more than 150,000 lbs. There are 30 locomotives illustrated, ranging from 152,000 lbs. to 201,000 lbs., the latter being an engine with Wootten firebox for the Delaware, Lackawanna & Western Ry. The size of driving wheels ranges from 4 ft. 9 ins. to 6 ft. 8 ins., and the cylinders range as high as 19½ × 30 ins. and 22½ × 26 ins. They are all simple engines.

TRACK AND RAILWAY SUPPLIES.—The Buda Foundry & Mfg. Co., Railway Exchange Building, Chicago. Cloth; 6¼ × 9¼ ins.; pp. 268; illustrated.

This illustrated catalogue and price-list includes a vareity of track tools (rail drills, jacks, rail benders, gages, handcars, etc.); also switches, frogs and a number of switch-stands of different designs. Other specialties include track, yard and coaling-station scales; pneumatic gates for bridges and highway crossings; wrecking frogs; cinder-pit fittings; and special track work for steam and electric railways. About 12 pages are devoted to lists of track material, middle ordinates for bending rails, and similar tabulated information.

CORRUGATED BARS FOR REINFORCING CONCETE.—Expanded Metal & Corrugated Bar Co., St. Louis, Mo. Paper; 10½x8¾ ins.; pp. 112; illustrated.

This elaborate and handsome pamphlet opens with a general description of the features and advantages of the company's form of reinforcing bar, and ends with several pages on the strength of reinforced-concrete beams, including a number of formulas and tables. The greater part of the book is occupied by excellent half-tone engravings representing a great variety of concrete structures in which bars of this particular type have been used. Buildings of all kinds and sizes, dams, sewers, canal headworks, filter basins, bridges and viaducts, floor for bridges and buildings, foundations, and chimneys are all included.

For other Proposal Advertisements see pages 55, 56, 57, 58, of Advertisements and Construction News page 148.

RESERVOIR.

Waterville, N. Y.

Sealed proposals will be received by the Board of Water Commissioners of the village of Waterville, N. Y., until 7 o'clock P. M., on the 13th day of May, 1907, for the construction of a reservoir of twenty-five million gallons capacity, and pipe line connecting it with the present water system, and other appurtenances.

At that time all bids will be publicly opened and read. The Board of Water Commissioners reserve the right to reject any or all proposals, and will award the contract, if same is awarded, at such time subsequent to opening bids as will suit its convenience, prior to May 25th, 1907. Bids will be received for the whole work only. A certified check upon a state and national bank to the amount of $500, drawn to the order of Earl Conger, Clerk, must be deposited by each bidder and accompany each bid as a guarantee that in case the contract is awarded to him, he will within ten days thereafter execute said contract.

Checks will be returned to unsuccessful bidders as soon as practicable, and the check of the successful bidder will be returned upon execution of the contract.

A bond satisfactory to the Board in amount and sureties will be required of the one to whom the contract may be awarded.

Proposals must be made upon blanks furnished by the Board.

Plans and specifications may be seen at the office of the Board of Water Commissioners in the Village of Waterville, N. Y., and at the office of Knight & Hopkins, Engineers, Rome, N. Y. Specifications and blank proposals may be obtained upon application to Earl Conger, Clerk, Waterville, N. Y.

Proposals must be sealed and addressed to Earl Conger, Clerk Board of Water Commissioners, Waterville, N. Y., and marked on the outside of the envelopes enclosing them "Proposal for Waterville Reservoir and Piping.

EARL CONGER, Clerk.
W. G. McLEAN,
R. WILSON ROBERTS,
M. W. TERRY,
16-4t Board of Water Commissioners.

PAVING.

Bluefield, W. Va.

Bids will be received by the Board of Supervisors for the City of Bluefield until two o'clock P. M., on the 16th day of May, 1907, for the construction of the following work:

First, the paving with brick on concrete foundation of all that portion of Bland Street and South Bland Street, between the curb lines of said street, and beginning at the point on said Bland Street where the present brick paving ends and extending along and over said Bland and South Bland Streets to the south side of South Street.

Second, for the paving with brick on concrete foundation all of that portion of Bluefield Avenue, between the curb lines of said avenue, beginning at the intersection of said avenue with Hoge Street and extending along and over said Bluefield Avenue to the intersection of said Bluefield Avenue with the first street west of Cherry Street.

Third, for the paving with brick on concrete foundation of all that portion of Princeton Avenue, beginning at the end of the present brick paving on Princeton Avenue and extending eastwardly upon and over said avenue, between the curb lines thereof, to the intersection of said Avenue with the east line of Lee Street.

Fourth, for the paving with brick on concrete foundation, of all that portion of Pulaski Street, beginning at the intersection of the West line of Mercer Street with said Pulaski Street and extending between the curb lines thereof, to its intersection with Roanoke Street; thence upon and over said Roanoke Street between the curb lines thereof, from the point of intersection of said Roanoke Street with Pulaski Street, to the intersection of said Roanoke Street with Clark Street, thence upon and over said Clark Street between the curb lines thereof, from its intersection with said Roanoke Street, a distance of one hundred and fifty feet (150) and upon and over Bedford Street from its intersection with the west side of Roanoke Street, between the curb lines of said Bedford Street, to the west side of C. R. Gibberson's lot.

Fifth, for the paving with macadam of so much of Princeton Avenue, between the curb lines thereof as lies between the east side of Lee Street and the east end overhead bridge, crossing the Norfolk & Western Railway Company's tracks and that part of Lee Street, from its intersection with Princeton Avenue, between the curb lines thereof, to the south side of Franklin Street.

The said brick and macadam paving to be done in accordance with detailed specifications on file in the office of the City Engineer. Surface to be covered is approximately 38,000 square yards of brick paving and 6,300 square yards of macadam paving.

The bids for said work shall include all cost for labor and material to complete the said work, in accordance with the specifications and to the approval and satisfaction of the City Engineer.

The bids are asked on the whole of the work referred to above and on each particular piece thereof as above set out, and the Board of Supervisors reserve the right to accept any bid for the whole of said work, or for any one or more particular piece thereof.

All bids should be mailed under seal to J. T. Akers, Auditor, Bluefield, W. Va.

E. BOND, Pres.
Board of Supervisors.
16-3t J. T. AKERS, Auditor.

SEWER.

City Clerk's Office,
Binghamton, N. Y., April 18th, 1907.

Notice is hereby given that sealed proposals for the construction of the 4th Ward Trunk Sewer in the City of Binghamton, New York, in accordance with the plans and specifications for said sewer adopted at a meeting of the Common Council, held December 17, 1906, now on file in the City Clerk's Office of said city, will be received at said City Clerk's Office until 8 o'clock P. M., May 6th, 1907.

Plans, specifications and proposal blanks will be furnished upon application to the City Clerk or to Henry N. Ogden, Consulting Engineer, Ithaca, N. Y.

The bidder to whom the work shall be awarded will be required to enter into a contract with the City of Binghamton therefor and to give at the time of entering into such contract a bond in the sum of $25,000, conditioned for the faithful performance of the contract in all its parts, with two sureties, resident free holders of the State of New York, or a surety company duly authorized to execute such bonds within the State of New York, said surety or sureties to be approved by the Mayor of said city.

The City of Binghamton reserves the right to reject any or all proposals.

D. C. HERRICK,
City Clerk.

Plans and specifications may be examined at the office of the "Engineering News," No. 220 Broadway, New York. 16-3t

PAVING.

Petersburg, Va.

Sealed proposals will be received by the Sewer, Sidewalk and Water Mains Committee, at the office of the City Engineer, Petersburg, Virginia, until 4 P. M., May 2d, 1907, for the construction of about 26,000 square yards of roadway pavement on different streets. Bids will be received for each of the following kinds of pavement:

Granite block on sand base.
Asphalt block on sand base.
Vitrified block on concrete base.

Samples of the materials to be used in the different kinds of pavement must be deposited with the City Engineer at or before the time of making bid.

Specifications for each of the above kinds of pavement may be seen at the office of the City Engineer, No. 35 West Tabb Street, from whom blank proposals can be obtained.

The Committee reserves the right to reject any or all bids.

A certified check for One Thousand Dollars, payable to the City Treasurer, Petersburg, Virginia, must accompany each bid.

Address bids to Sewer, Sidewalk and Water Mains Committee, care of City Engineer's office, Petersburg, Virginia.

16-2t R. D. BUDD, City Engineer.

PAVING AND DRAINAGE.

Natchez, Miss.

Alternate proposals for paving approximately 22,500 square yards of street surface with Sheet Asphalt, Bituminous Macadam, or Vitrified Brick and for constructing necessary cement curbing (12,500 feet) and furnishing and laying (6,000 linear feet) of storm sewers, from ten (10) to twenty-four (24) inch, including connections and appurtenances are solicited by the Board of Mayor and Aldermen.

Bids will be received until 5 P. M., Wednesday, May 15th, 1907, when they will be publicly opened and read.

A certified check in the sum of one thousand dollars ($1000.00) deposited in accordance with the terms of the specifications will be required of each bidder.

Further information will be furnished on application to the undersigned.

The right to reject any or all bids, or to accept any bid which may appear in the interest of the city is hereby especially reserved.

GEO. EISELE, City Clerk.
J. N. HAZLEHURST,
Consulting Engineer. 16-4t

STEEL BRIDGE.

Pensacola, Fla.

The Board of County Commissioners will receive bids for the erection of a steel bridge across Little Bayou near Pensacola, Fla., in accordance with plans and specifications on file in my office.

Bids will be opened at 7.30 o'clock P. M., Tuesday, June 4, A. D. 1907. The Board reserves the right to reject any and all bids.

A. M. McMILLAN,
16-1t Clerk.

Office of the President of the Borough of Richmond, Borough Hall, St. George, New Brighton, New York City.

Sealed bids or estimates will be received by the President of the Borough of Richmond, at the above office, until 12 o'clock M., on

TUESDAY, MAY 7, 1907,
Borough of Richmond.

No. 1. For materials and work of the general construction in reinforced concrete of the foundations, building, runway, connecting flue and chimney, for a refuse destructor at West New Brighton, Borough of Richmond, the City of New York.

For full particulars see City Record.

GEORGE CROMWELL,
16-1t President.

SEALED PROPOSALS will be received at the office of the Light-House Engineer, Tompkinsville, N. Y., until 1 o'clock P. M., May 20, 1907, and then opened, for furnishing the material and labor necessary for the construction of a lamp shop at the Light-House Depot, Tompkinsville, N. Y., in accordance with specifications, copies of which, with blank proposals and other information, may be had upon application to CHAS. L. POTTER, Major, Corps of Engineers, U. S. A., Engineer Third Light-House District. 16-2t

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OFFICE COMMISSIO[illegible], District of Columbia, Washington, [illegible]il 12, 1907.—Sealed proposals will be [illegible]eived at the office until 12 o'clock, no[illegible]nday, May 13, 1907, for constructing se[illegible]n the District of Columbia. Forms, [illegible]ications and necessary information m[illegible]e obtained at Room 43, District Buildi[illegible]Vashington, D. C. HENRY B. F. MACF[illegible]AND, HENRY L. WEST, JOHN BIDDL[illegible] Commissioners, D. C. 16-2t

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SEALED PROPOSALS i[illegible]plicate will be received at the office of th[illegible]mmissioner of Immigration, Ellis Island[illegible] Y. H., until 2:30 P. M., April 24, 1907[illegible]d opened immediately thereafter, for [illegible]bor and materials required for the ins[illegible]tion of a coal and ash conveyor, and [illegible]rection of a dumping platform at the [illegible]r plant. Particulars as to limitations a[illegible]nditions governing bidders may be ob[illegible]d from ROBERT WATCHORN, Commis[illegible]r. 16-1t

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DEPARTMENT OF T[illegible] INTERIOR, UNITED STATES RECL[illegible]TION SERVICE, Washington, D. C., [illegible]il 10, 1907.—Sealed proposals will be re[illegible]d at the office of the Engineer, Unite[illegible]tes Reclamation Service, Belle Fourche[illegible]outh Dakota, until 4 o'clock P. M., April [illegible] 1907, for furnishing about 350,000 pound[illegible] steel mainly for reinforcement of concr[illegible] Particulars may be obtained by applica[illegible] to the offices of the United States Recl[illegible]ation Service, Washington, D. C.; Belle Fo[illegible]he, South Dakota, or Crawford, Nebrask[illegible] JAMES RUDOLPH GARFIELD, Secreta[illegible]. 16-2t

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PROPOSALS for Post Ex[illegible]ge and Gymnasium, Office Constructing [illegible]uartermaster, Prescott, Ariz., April 17, 1907.—Sealed proposals for construction, plum[illegible]ng, hot water heating, electric wiring and [illegible]owling alleys, Post Exchange and Gymnasium, Whipple Barracks, Arizona, will be re[illegible]ived here until 3 P. M., May 17, 1907, and then opened. Information furnished in offices of Chief Quartermasters, San Francisco, Calif., St. Paul, Minn., Denver, Colo., Depot Quartermaster, St. Louis, Mo., and here. CHAS. C. WALCOTT, JR., Capt. and A. Q. M. 16-4t

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OFFICE OF CONSTRUCTING OFFICER, U. S. Soldiers' Home, Washington, D. C., April 13, 1907.—Sealed proposals will be received here until two o'clock P. M., May 13, 1907, and then publicly opened, for the erection of two sets of Officers' Quarters, and for excavation for and construction of an iron fence about the Soldiers' Home Grounds. Information on application. Deposit of $25 required on drawings for Officers' Quarters. JOHN STEPHEN SEWELL, Captain, Engineers, Constructing Officer. 16-4t

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DEPARTMENT OF THE INTERIOR, OFFICE OF SUPERINTENDENT UNITED STATES CAPITOL BUILDING AND GROUNDS, Washington, D. C., April 11, 1907.—Sealed proposals, in duplicate, will be received and publicly opened at the above office on Wednesday, May 8th, 1907, at 12 o'clock, noon, for the construction of two (2) subways to connect the Capitol Building with the Senate and House Office Buildings. The work will include excavation, shoring and subway construction. Plans and specifications will be issued to responsible intending bidders upon the receipt of a certified check for $25.00 as a guarantee for the return of the plans and specifications. Proposals received will be for the entire work, and will be made upon bidding forms attached to the specifications. The right is reserved to reject any or all bids, and to waive technicalities and informalities. ELLIOTT WOODS, Superintendent U. S. Capitol Building and Grounds. Approved: JAMES RUDOLPH GARFIELD, Secretary. 16-3t

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U. S. ENGINEER OFFICE, Savannah, Ga., April 15, 1907.—Sealed proposals for constructing one torpedo storehouse, one cable tank, one three-room addition to mining casemate, one loading room, one double primary station and one double secondary station, at Fort Screven, Tybee Island, Ga., will be received at this office until 12, noon (Eastern standard time), May 15, 1907, and then publicly opened. Information furnished on application. DAN C. KINGMAN, Lieut.-Col., Corps of Engineers, U. S. Army. 16-4t

SITUATIONS OPEN

A CONSULTING ENGINEER for steam and electrical plant wishes to engage a technically educated man with good connections and perseverance to see prospective clients and work up new business. Address "A. B. 16," Engineering News, New York. 16-1t

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DRAFTSMAN WANTED in consulting engineer's office. Preferably one familiar with steam fitting and plumbing. Give full particulars. Address "B. B. 16," Engineering News, New York. 16-1t

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CONSTRUCTION COMPANY, doing a general contracting business, and located within 150 miles of New York City, wishes the services of a young engineer; thoroughly experienced in the use of transit and level, who must also be a fair draftsman; for position in connection with the laying of pipe sewers. Six months' work guaranteed with possibility of permanency and advancement to the right man. Applicant must give full particulars as to age, education, experience, amount of salary wanted, and earliest date at which he can begin work. Address "C. B. 16," Engineering News, New York. 16-1t

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WANTED—Draftsman, experienced in steam power work, power transmission, etc., by a Boiler and Engine House in New York City; permanent position. In answering state full qualifications. Address "D. B. 16," Engineering News, New York. 16-1t